

# Pregnancies in women newly diagnosed with HIV in the UK and Ireland: 2012-2016

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## BACKGROUND

- In the UK and Ireland (UK/I) antenatal HIV screening is recommended to all women, with uptake of over 99%
- Most HIV-positive women are now aware of their diagnosis before conception (over 85% in 2012-14), but the proportion of these with recent diagnosis (i.e. in previous year) has not been explored
- Recently diagnosed pregnant women (whether before or during pregnancy) have important health needs, particularly if their HIV diagnosis is at a later disease stage

**AIM** To describe pregnancies of women diagnosed in the year prior to or during pregnancy

## RESULTS

- Overall, 77% (777/1028) of the recently diagnosed women were diagnosed in pregnancy
- 24% (237/1008) of women were white, 67% (672) Black African, with 85% (833/981) born outside UK/I
- Median age at diagnosis was 31yr (IQR:27,35)

Table 1: Characteristics of pregnancies in newly diagnosed women

Characteristic	Dx year prior to pregnancy	Dx during pregnancy
<b>Pregnancy Outcome</b>	(n=233)	(n=777)
Livebirth	202 (86.7%)	712 (91.7%)
Miscarriage	24 (10.3%)	15 (1.9%)
Termination	4 (1.7%)	38 (4.9%)
Stillbirth	3 (1.3%)	11 (1.4%)
Gone abroad	-	1 (0.1%)
<b>Antenatal booking</b>	(n=209)	(n=727)
1 <sup>st</sup> trimester	141 (67.5%)	366 (50.3%)
2 <sup>nd</sup> trimester	56 (26.8%)	290 (39.9%)
3 <sup>rd</sup> trimester	12 (5.7%)	71 (9.8%)
<b>ART initiation</b>	(n=233)	(n=777)
Prior to pregnancy	122 (52.4%)	-
≤28wk gestation	86 (36.9%)	618 (79.5%)
>28wk gestation	6 (2.6%)	68 (8.8%)
During pregnancy (date nk)	5 (2.1%)	44 (5.7%)
None reported	14 (6.0%)	47 (6.0%)

Among livebirths, delivery viral load was detectable (>50c/ml) for 11% of those diagnosed before, and 20% of those diagnosed during pregnancy

## METHODS

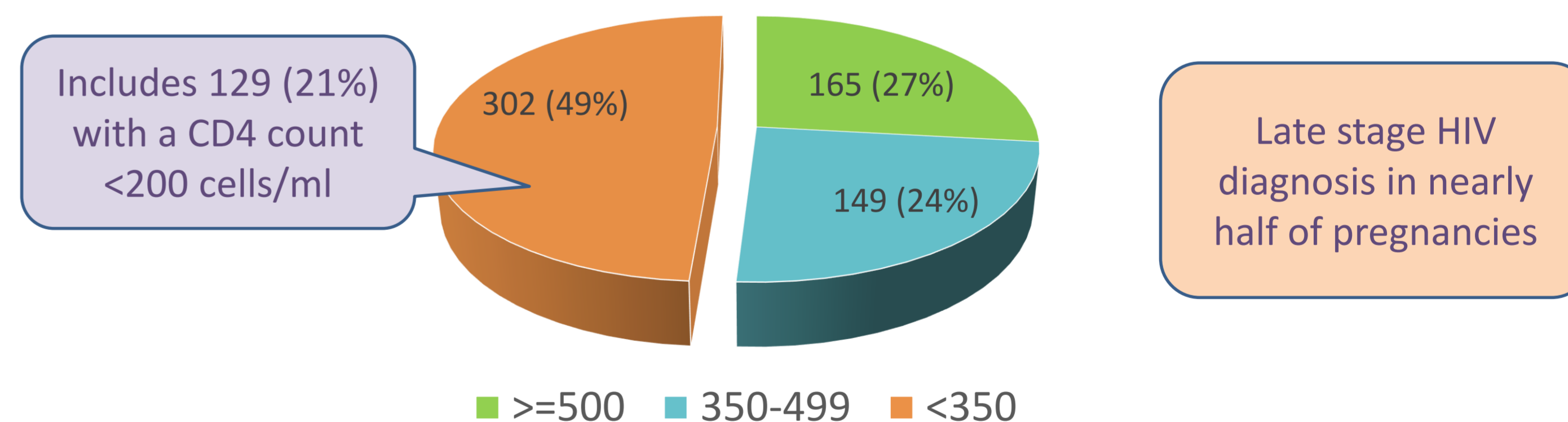
- The National Study of HIV in Pregnancy & Childhood (NSHPC) conducts active surveillance of pregnancies in women living with HIV in the UK/I
- Data on all pregnancies with expected date of delivery (EDD) 2012-2016 and reported by the end of 2017 were analysed
- New HIV diagnosis was defined as that occurring within 12 months prior to conception or during pregnancy
- 1028 pregnancies reported to NSHPC met the study definition of “newly diagnosed” (18% of total 5762 pregnancies for the time period)
- Late stage HIV diagnosis was defined as having a CD4 count <350 cells/ml at delivery

### DIAGNOSIS DURING PREGNANCY (n=777)

- The proportion of pregnancies with antenatal diagnosis declined from 16% (213/1316) in 2012 to 10% (106/997) in 2016, p<0.005
- Most diagnoses in pregnancy (713/755, 94%) were in an antenatal setting; 3% (21) were in a GUM clinic, and 0.8% (6) were tested abroad
  - 91% (712/766) were diagnosed in the first or second trimester
  - 17/777 (2%) were reported to have seroconverted after a negative test earlier in the pregnancy
- Half **booked late** (>12 gestational weeks) (Table 1) and, of these, 13% (48/361) were diagnosed in the third trimester
- 94% (730/777) received ART in pregnancy. Median ART start week was 19wk (IQR: 16, 23wk)
  - Among the 47 **reported not on ART**: 39 were misc/TOPs and 8 livebirths (3/8 diagnosed at delivery, 2 had engagement issues, 1 was an elite controller, 2 unknown)
- Among migrants with data available, 15% (58/384) **arrived in the UK/I during pregnancy** and 16% (63/384) in the year prior

### CD4 count at diagnosis

In women diagnosed during pregnancy, four-fifths (616/777) of cases had a CD4 count reported within 60 days of diagnosis



- Late stage HIV diagnosis was associated with Black African ethnicity, being born outside UK/I and age over 30 years, p<0.05

### VERTICAL TRANSMISSIONS

5 transmissions occurred in pregnancies with antenatal diagnosis (no transmissions to date among women diagnosed in the year prior to pregnancy)



Among these cases late booking in 3, seroconversion in 2 and late ART initiation in 2

### DIAGNOSIS IN YEAR PRIOR TO CONCEPTION (n=233)

- For half (106/207) of these pregnancies, the mother was diagnosed in a genitourinary medicine (GUM) clinic (Figure 1)
  - 24% (49/207) of these pregnancies were in women **diagnosed in a previous pregnancy**
- Over half (122/233) **conceived on ART**. 14/233 were not on ART (13 pregnancies resulted in a miscarriage or termination)
- 68% (141/209) booked by 13 weeks of pregnancy
- 39% had first **CD4 count in pregnancy <350cells/ml**

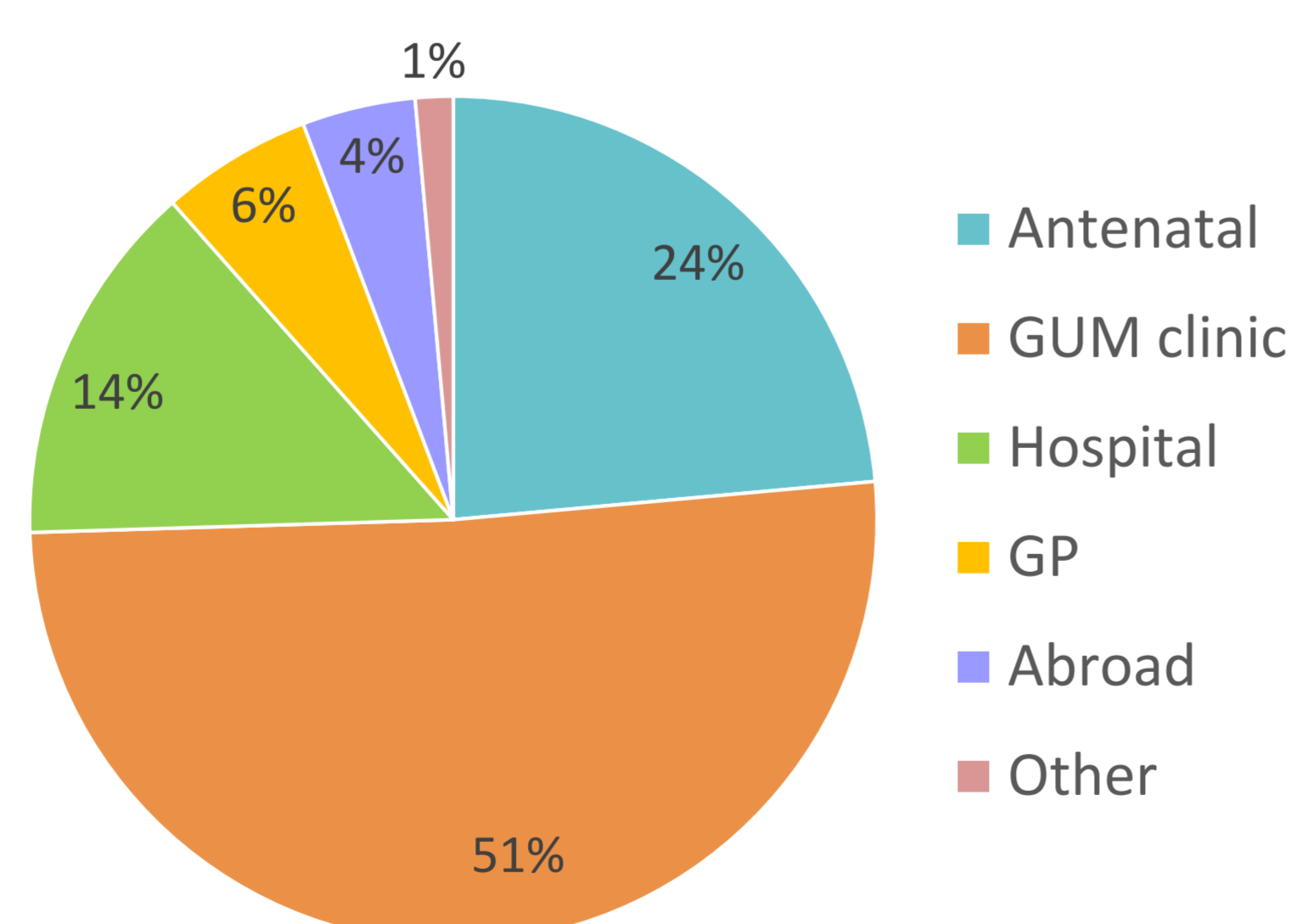


Figure 1: setting of diagnosis for women diagnosed in the year prior to pregnancy

## CONCLUSIONS

- The proportion of women diagnosed during pregnancy continues to decline, reflecting improved testing outside pregnancy and high uptake of antenatal HIV testing over the last decade
- Half of women diagnosed in pregnancy had low CD4, indicating that HIV infection could have been identified at an earlier stage
- Challenges remain regarding management of newly diagnosed pregnant women, including late stage HIV diagnosis which was the case for half, late presentation for antenatal care and late ART initiation

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