

Preventing vertical HIV transmission in the UK: successes and emerging challenges

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Background

- The UK has met UNAIDS 90-90-90 targets¹ since 2017 and a major success has been the low vertical HIV transmission rate, declining from 2.1% in 2000-01 to 0.28% in 2015-16 among diagnosed women living with HIV (WLHIV)
- **The British HIV Association (BHIVA) recommends follow-up of all infants of WLHIV at 18-24mths for antibody testing ('18-24Ab')**, regardless of negative PCR tests, to establish infection status².
- BHIVA guidelines recommend formula feeding to eliminate postnatal transmission risk but state (pre-COVID) that **virologically suppressed women on ART with good adherence who choose to breastfeed may be clinically supported to do so**²



¹ www.unaids.org/en/resources/909090



² www.bhiva.org/pregnancy-guidelines





- The **Integrated Screening Outcomes Surveillance Service (ISOSS)**, part of Public Health England's Infectious Diseases in Pregnancy Screening Programme, **monitors all pregnancies to diagnosed WLHIV and their infants in the UK**
- All children diagnosed with HIV <16yrs are reported, with **enhanced data collection conducted for those vertically infected in the UK**. Clinical Expert Review Panels establish circumstances surrounding transmissions and contributing factors

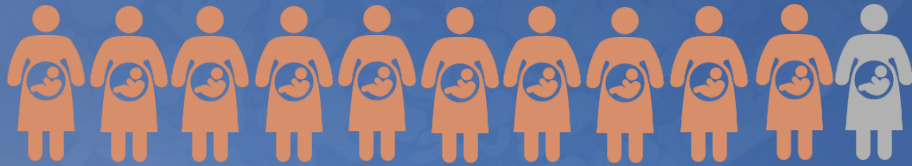
Aim: To **describe maternal characteristics and vertical transmissions** among singleton liveborn infants **in 2017-18** with HIV status reported by 30/09/20 and **cases of supported breastfeeding 2012-19**



Results

In 2017-18 there were 1527 livebirths:

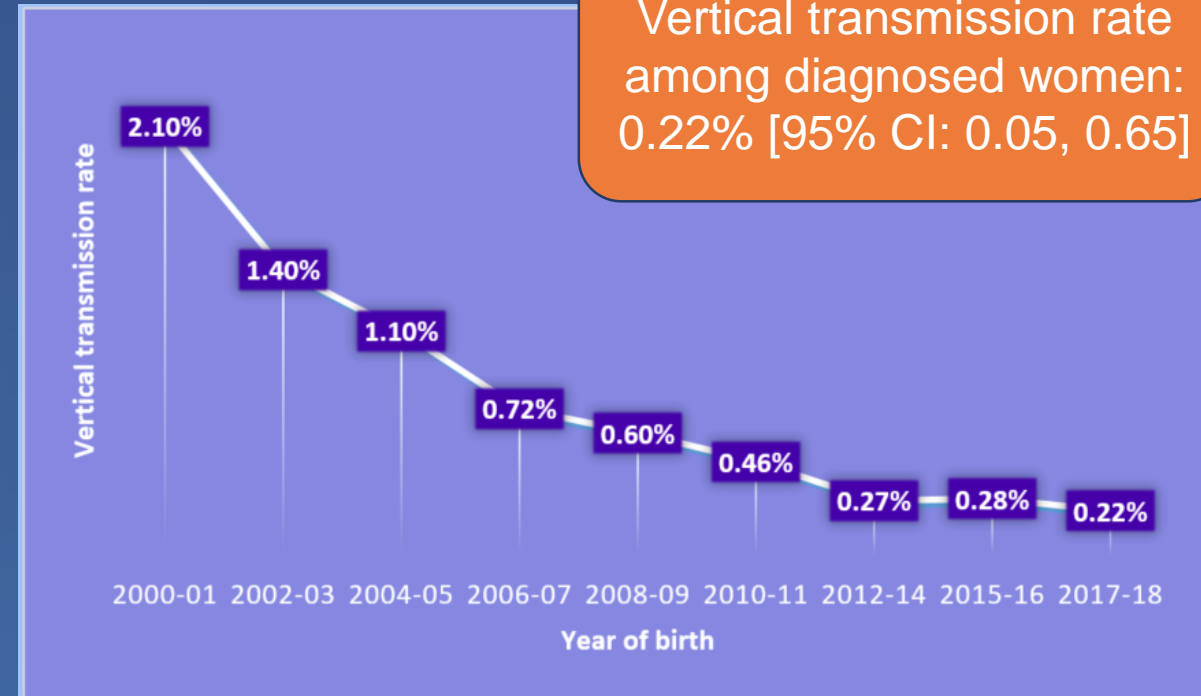
89% (1353/1520) of mothers diagnosed before pregnancy



77% (1141/1478) conceived on ART



93% (982/1053) delivered with undetectable virus
(VL <50c/ml at ≤30 days pre-delivery)



Where delivery viral load was <50c/ml, the vertical transmission rate was 0.11% ([95%CI 0.002, 0.64], 1/870)



Results: emerging challenges

Early discharge and loss to follow-up (2017-18):

- 88% (1337/1527) infants classified as uninfected based on ≥ 2 negative PCRs >1mth of age and/or negative 18-24Ab
- **59% (784/1337) infants were reported as uninfected based on negative 18-24Ab** (in line with BHIVA guidelines)
 - 11% (145/1337) were LTFU <18-24Ab (with negative PCRs reported)
 - 12% (158/1337) were discharged early based on a negative antibody between 3-17mths
 - 18% (250/1337) infants were discharged with only negative PCRs

Issues contributing to vertical transmissions (2017-18): 0.22%, 3/1340

In the 3 transmissions contributing factors identified included disengagement with health care and late booking for maternity care after recent UK arrival (>30wk).

Supported breastfeeding:

Since 2012: 151 reports of supported breastfeeding among women (duration: 1day-24mths)

55 born 2017-18: infection status is unconfirmed in most cases to date and 6 infants were LTFU with unknown status



Conclusions

- The sustained low vertical transmission rate reflects **ongoing successes in pregnancy screening and clinical management**
- Increasing complexities of infant follow-up to 18-24mths, including **LTFU** in the **supported breastfeeding** era and underscores the need for robust surveillance
- Further work ongoing to investigate possibility of **inequalities/barriers to care** in LTFU group
- **ISOSS is uniquely placed** to continue monitoring practice and outcomes nationally and to assess the impact of COVID on clinical care

Acknowledgements

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ISOSS is a part of the national Infectious Diseases in Pregnancy Screening (IDPS) Programme, UCL are commissioned to deliver the service

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