

## Utilisation of the Perinatal Virtual Clinic: The last 9 years

### **2498/2500 characters**

Glenn JS, Eni-Olotu A, Bailey A, Bamford A, Lyall EGH, Mackie NE, Tickner N, Foster C

**Background:** The monthly multidisciplinary Perinatal Virtual Clinic (PVC) receives UK and international referrals to support complex case management for individuals with Perinatal HIV (PHIV) and in prevention of vertical transmission (PVT).

**Methods:** Retrospective review of children, youth and pregnant people/women with HIV referred to the PVC between January 2017 and December 2025. Reason for referral, demographic, antiretroviral therapy (ART), immunological and virological data are described.

**Results:** 749 referrals were made for 592 individuals discussed over 102 meetings (median 7 cases per PVC). Repeat discussions were required in 158/592 cases (27%). Referrals were from 37 countries; UK 560/749 (75%) and from low middle income countries (LMIC) 75/749 (10%). Primary reason for referral; PHIV management 490/592 (84%), PVT 96/592 (16%) and other 7 (2%) (post-exposure prophylaxis (4), paediatric HIV acquired horizontally (1), HTLV vertical transmission (2)).

The median age of PHIV referrals (636 referrals in 490 individuals) was 13 years (IQR 9-16) with 232/636 (36%) for virological failure and 204 (32%) for ART simplification. Other reasons included drug side effects and toxicity 94/636 (15%), co-infections 36 (6%) with mycobacteria (15/25 tuberculosis, 10/25 non-tuberculosis), hepatitis B and C, cytomegalovirus, Epstein-Barr virus, Toxoplasma gondii, herpes simplex virus-1, varicella zoster virus and co-morbidities not attributable to ART 32 (5%).

Resistance data available for 359/490 (73%) individuals with PHIV; 81/359 (23%) single, 98 (27%) dual, 29 (8%) triple and 14 (4%) quadruple class resistance. Resistance to nucleoside reverse transcriptase inhibitors in 171/359 (48%), non-nucleoside reverse transcriptase inhibitors in 177 (49%), protease inhibitors in 38 (11%) and integrase strand transfer inhibitors in 34 (9%).

Between 2017-2025, 96 PVT referrals were discussed, with numbers increasing (2 in 2017, 29 in 2025). Referrals were from 14 countries, with 7 (7%) from LMIC and 75 (78%) from the UK. The most common referral reason was virological failure in pregnancy 32/96 (33%), low-level viremia in pregnancy 15 (16%), infant postnatal prophylaxis 19 (20%) and breastfeeding 12 (13%).

**Conclusion:**

The PVC supports complex perinatal HIV care across diverse global settings, facilitating expert decision-making, maintenance of specialist knowledge and international collaboration. This model may be transferable to other rare or complex paediatric conditions.