HIV postnatal prophylaxis and infant feeding policies vary across Europe: results of a Penta survey

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Background & Aim

- **Postnatal prophylaxis (PNP)** and **infant feeding** guidance are essential for preventing vertical transmission (VT) of HIV[1, 2].
- Policies and practice have evolved over time and vary globally[1, 3].
- The aim of this survey was to ascertain and summarise PNP and infant feeding **policies and practices** across Europe, in order to highlight any key differences and to inform future harmonised guideline development.

Methods

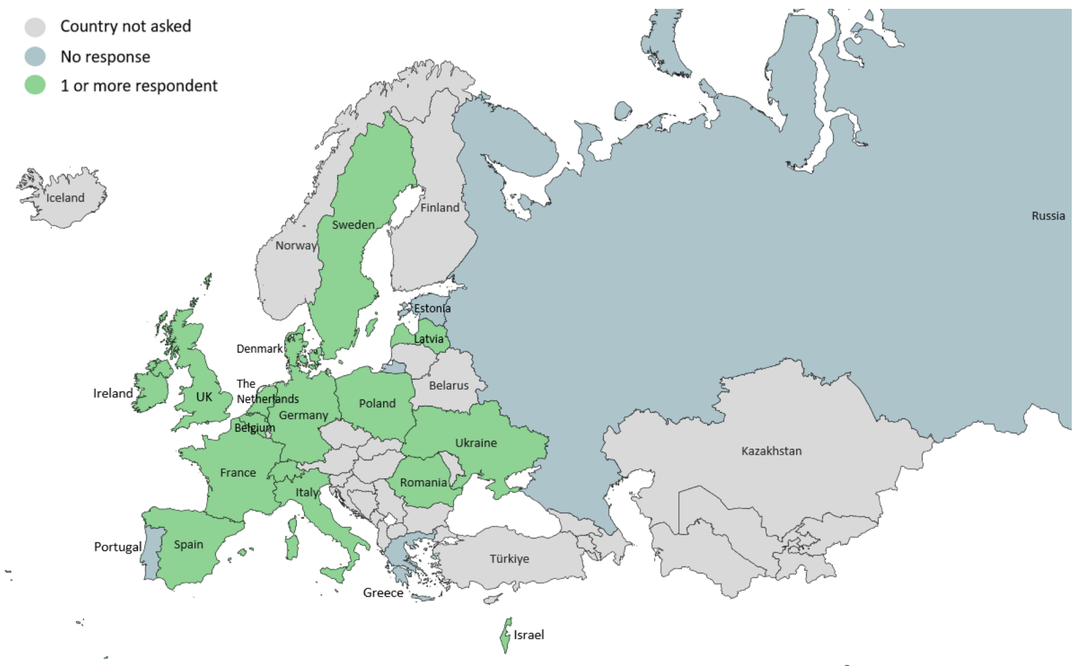
- **32 senior clinicians** with relevant expertise working in **20 countries** from the WHO European Region were invited to complete a REDCap questionnaire (July-August 2023).
- **Multiple experts** were invited from within **6 countries** (France, Germany, Italy, Spain, UK, Ukraine) to ensure we received at least 1 response from these key countries and to capture potential within-country regional differences.
- The survey was **piloted** prior to deployment, and a personalised reminder was emailed to participants who did not respond within 2 weeks.

Results

COUNTRIES AND GUIDELINES

- **23/32** of invited paediatricians responded, representing **16/20 countries.**
- There were multiple respondents from the same country for Italy (5), UK (2), Germany (2) and France (2) (Figure 1).

Figure 1. Participation among countries in the WHO European Region



- National guidelines were reported to be available in **15/16 countries**.

INFANT FEEDING

- Guidelines allow/support breastfeeding of an infant born to a person living with HIV in **7/16 countries**; in the other 9, guidelines do not support/do not specify (Table 1).

Table 1. Countries where guidelines allow/support the breastfeeding of an infant born to a person living with HIV

Allow/support breastfeeding	Do not allow/support breastfeeding	Not specified
Switzerland	Belgium	Italy†
UK	Denmark	
Germany	Spain	
Netherlands	France	
Poland	Israel	
Ukraine	Italy†	
Ireland	Latvia	
	Romania	
	Sweden	

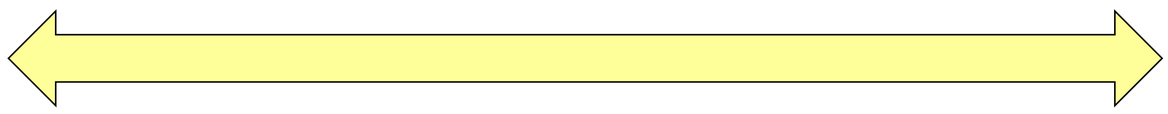
† Within country variation reported in 1/4 countries with multiple respondents.

- 3/23 respondents **extend PNP duration** for breastfed infants.
- Recommendations for frequency of maternal laboratory monitoring if breastfeeding varied from weekly from PNP cessation, to initially monthly, then every 2-3 months.

POSTNATAL PROPHYLAXIS

- All countries use risk stratification to guide choice of **PNP regimen**:
  - 9/16 countries – 3 risk categories
  - 6/16 countries – 2 risk categories
  - 1/16 countries (Italy) – differences in categorisation reported

Figure 2. The criteria required to classify an infant into the lowest and highest risk group



Low risk

All respondents: **undetectable maternal VL***.

Additional criteria reported included:
- infant born full term
- no breastfeeding

High risk

All respondents: **no ART in pregnancy** and/or a **detectable VL***.

Additional criteria reported included:
- complicated childbirth
- acquired HIV during pregnancy

*varying responses were described regarding the timing of this VL measure in pregnancy.

- For the **lowest risk category**, PNP duration ranged from no PNP to 4 weeks, with most countries recommending 2 weeks (Table 2).

Table 2. Postnatal prophylaxis (PNP) drug choice and duration used in participating countries for the **lowest risk category**

Duration of PNP	No PNP	7-10 days	2 weeks	2-4 weeks	4 weeks
Country	Switzerland, Latvia, Italy†, Germany†	Spain	UK, Germany†, Sweden, Israel, Poland, The Netherlands, Denmark, Italy†, France‡	Italy†, Ukraine	Romania, Belgium, Ireland, Italy†

† Within country variation in practice reported in 2/4 countries with multiple respondents.
‡ All responses indicated zidovudine was used for the lowest risk category, apart from 1 which reported nevirapine (France).

For the **highest risk category**:

- the most common regimen was zidovudine/lamivudine/nevirapine (20/23 respondents)
- use of zidovudine/lamivudine/raltegravir was reported by 2 respondents (Israel and Italy (1/5))
- 1 country (Latvia) reported using 2 drugs as PNP for this category: zidovudine/nevirapine
- regimen duration varied from **2 to 6 weeks**

Conclusions

- Guidelines and practice for PNP and infant feeding **vary substantially across Europe** and within some countries, although some general principles are consistent across all settings.
- This variation across Europe partly reflects the **lack of clinical trial data** relevant to the contemporary population of pregnant people living with HIV in Europe today, where most are on highly effective ART and have a very low VT risk[4, 5].
- Due to the lack of clinical trial evidence, data from **large-scale pooled observational studies** will be crucial to inform future practice.
- Effort is needed across Europe to align policies and practice to reflect the most up-to-date knowledge to ensure the risk of VT is minimised and unnecessary PNP avoided, while at the same time supporting families to make informed decisions on infant feeding.

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