

healthy all life long

LOSS TO FOLLOW-UP & HIV CARE INTERRUPTION: INSIGHTS IN THE SITUATION IN BELGIUM

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Introduction: the HIV continuum is not always linear



Adapted from Euvrard et al. The cyclical cascade of HIV care: temporal care engagement trends within a population-wide cohort. https://doi.org/10.1371/journal.pmed.1004407

Why is retention in HIV care important?

- Ensure sustained access to ART leading to VL control
- Individual health outcomes
 - Prevent HIV-associated complications
 - Allow screening and prevention of comorbidities
 - Reduce risk of developing antiretroviral drug resistance
 - Reduce mortality
- > Control of the HIV epidemic
 - Decrease community transmission of HIV



What do we know on engagement in care in Belgium?





Gap between HIV diagnosis and entry into care, Belgium

Year of diagnosis — 2014-2016 — 2017-2019 — 2020-2022



From: Van Beckhoven et al. A dual cross-sectional and longitudinal perspective on the continuum of HIV care to disentangle natural epidemic evolution from real progress, Belgium 2014-22. HIV medicine 2025.

Time from HIV diagnosis to first visit in an HIV reference centre, 2023 (n=376)





Incidence rate, predictors and outcomes of interruption of HIV care: nationwide results from the Belgian HIV cohort

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Objectives

- > Estimate the HIV care interruption (HCI) rate and associated factors
- Rate of return to care
- Type of HCI and associated factors



Methods

Setting and participants

PLWHIV in care in HIV reference centres between 01/01/2007 and 31/12/2016

Definitions

- HIV care record = measure of CD4, VL or medical visit in a HRC
- HIV care interruption (HCI) = Occurrence of a period of <u>one year</u> without HIV care record in HRC
- Return to HIV care after >= 1 year of HCI
 - Gap in care during HCI when VL at return > 200 copies / mL
 - Care elsewhere during HCI when VL at return \leq 200 copies / mL



Methods

Statistical analysis (in SAS)

- 1. Multiple imputation for missing values
- 2. Rate of first HCI and associated factors: Poisson regression
- 3. Return to HIV care after HCI: cumulative incidence with death as competing risk
- 4. Factors associated with a gap in care during HCI: cause-specific hazard models



Results

Population description

16 066 PWHIV with care record in HRC / 10-year period

= 78 625 person-years of follow-up

66% Male; median age at baseline 40 years

Rate of HIV care interruption

N= 4151 PWHIV (25.8%)

Rate of 5.3/100 py (95%CI: 5.1-5.4/100 py)



Results

Return to HIV care

77.5 % (95%CI: 75.7-79.2%) Death: 0.2 %

No return (outmigration): 22.3 %



Viral status at return to care



Gap = VL > 200 copies/mL

Factors associated with HCI: Adjusted rate ratios





Mortality following an interruption in HIV care

Mortality rate among PWHIV in stable care 0.5/100 py

1-year mortality rate following HCI 1.0/100 py

1-year mortality rate following HCI & CD4<200 (gap) 2.7/100 py



In summary...



Main identified risk factors

- Younger age
- Men (MSW) vs women
- PWID
- Non Belgian
- Recent HIV diagnosis
- Low nadir CD4
- No ART



... And in more recent years

- Similar HIV care interruption rate ~5% annually
- Slightly lower rate of return to care: 73% (95%CI: 72%-74%)
- But less real gaps during HCI:
 - in 2023, 12% had VL > 200 copies/mL after interruption
 - > Real gap in care ~0.4/100 PWHIV-year in care



In other countries

Setting	Year	HCI definition	% HCI	Associated factors
Spain ¹	2004-20	≥ 15 months	36% 7.2/100 000 py	younger age, lower education level, PWID or hetero, born outside Spain, HepC
Spain, Catalonia ²	2016-21	≥ 12 months	25%	younger age, not born in Spain, PWID, detectable last VL, recent HIV diagnosis, care in smaller hospital
France, Normandie ³	2010-16	≥ 18 months	3.0/100 000 py	delayed linkage to care (>6 monts after diagnosis), HepC coinfection, born in SSA, no mailing adress in medical file, younger age, not on A
UK ⁴	2000-12	% months in care		being a man, MSM, white ethnicity, higher CD4+ cell count at start of ART, and initiation of ART with an NNRTI-based regimen

¹ Izquierdo et al. HIV medical care interruption among people living with HIV in Spain, 2004–2020. AIDS 2023

² Palacioe-Vieira et al. Developing and validating a clinical risk score to predict losses in the PSICIS cohort of PWHIV. Int J STD AIDS 2024



Sciensano³ Fournier et al. Incidence and risk raciors for medical care interruption in people and ⁴ Sabin et al. Association between engagement in-care and mortality in HIV-positive persons. AIDS 2017 ³ Fournier et al. Incidence and risk factors for medical care interruption in people living with HIV in a French provincial city. PlosOne 2020

Conceptual framework for the reasons for disengagement



Disengagement is a multidimensional issue influenced by a mix of factors, often driven by immediate life events.



Sources: World Health Organization. Supporting re-engagement in HIV treatments services. Policy brief. 2024. Burke et al. Reasons for disengagement from antiretroviral care in the era of "treat all": a systematic review. J Int AIDS Soc. 2024



HIV care interruption in the overall continuum of care, 2023





Monitoring strategy

BHIVA Standards of care recommendation:

Services should have mechanisms in place to ensure all people living with HIV are retained in specialist care

Systematic monitoring of engagement in care and mechanisms to identify and follow up those that do not attend

In the HIV reference centers:

- Systematic monitoring of engagement in care in all 12 HIV reference centres
- Various practices:
 - Systematic review of all files 6-monthly or yearly
 - Systematic contact trial if one missed visit
 - Closer monitoring for those with vulnerability factors



Current & innovative strategies in healthcare organisation to maximize engagement

- New patient systematic « briefing » including
 - Discussion and motivational talk on engagement in care
 - o Identification of individuals with higher risk of disengagement
 - Discuss on preferred communication mode(s), including involvement of the GP
- Close working links with primary care & peer support
- Integrate PWHIV retention into routine staff discussions
- Preconsultation reminder messages
- Schedule laboratory prior to visit to maximize time spent with provider
- Extended hours: for instance offer of evening appointments
- Online consultation ?
- Psycho-social care for undocumented PWHIV in the HRCs
 Sciensano

Individually tailored reengagement

WOMEN AND GIRLS

Even of Disclosure: Worry about revealing HIV status to partners and family.

Violence and Abuse: Risk of genderbased violence and intimate partner violence.

Gender Inequalities: Societal norms may hinder access to care.

Stigma: Social stigma surrounding HIV status.

MIGRANTS WORKERS AND DISPLACED POPULATIONS

W Unplanned Mobility: Frequent moves due to work or displacement.

() Language and Cultural Barriers: Difficulties communicating or feeling understood.

X Lack of Resources: Unaware of available services or how to access them.

Stigma: Fear of discrimination in new environments.



ADOLESCENTS AND YOUNG ADULTS

School Conflicts: Attendance and schedules interfere with clinic visits.

Incomplete Understanding: May not fully grasp their HIV status without proper disclosure.

Acceptance Issues: Might engage in care without fully accepting their diagnosis.

OLDER PEOPLE

Polypharmacy: Managing multiple medications.

Comorbidities: Presence of other health conditions.

Complex Treatments: Difficulty with complicated regimens. **KEY POPULATIONS: Gay men and other men** who have sex with men, Sex workers, People who inject drugs, Trans and gender-diverse people, and People in prison or closed settings

Stigma and Discrimination: Facing social exclusion and judgment.

Criminalization: Legal issues related to behaviors or identities.

Lack of Tailored Services: Services not designed to meet their specific needs.

Violence and Rights Violations: Exposure to abuse and human rights

Privacy Concerns: Worry about confidentiality in care settings.

Sources: World Health Organization. Supporting reengagement in HIV treatments services. Policy brief. 2024.



Conclusion

Overall, entry in HIV care fast & disengagement limited in Belgium BUT,

- Life-long care & ART -> many opportunities to disengage over the years
- Some individuals at higher risk of disengagement
- Reengagement crucial particularly among those with advanced disease
- There are still possibilities for further improvement in the engagement in HIV care
- Studies in Belgium limited to HIV-specific care,
 - interest in a more holistic approach in studying care trajectories of PWHIV,
 - ✤ and data on HIV continuity of care in prisons

