Global Health in Amsterdam

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Joep Lange’s legacy

The H-team
HIV transmission elimination in Amsterdam

Netherlands

In the Netherlands are 22,231 people living with HIV registered in 2013
1,214 new HIV positives registered

80% is male

Risk groups: MSM
people from HIV-endemic area’s (Africa, Eastern Europe)

In the Netherlands is 35-45% unaware of their HIV+ status

In Amsterdam 17%
Outside the main cities 47%

United States 21%
United Kingdom 28%

Entry into care in the Netherlands

43% late into care 2012
26% entry into care with advanced HIV disease
Delay in treatment initiation

Median CD4+ cell count at entry into care 390/mm³ in 2012. 320/mm³ at the start of cART.

Knowledge of HIV status

- Approximately 7000 people with HIV infection unaware
- These are estimated to be responsible for the majority of new infections

Cascade of care: on cART and suppressed

HIV Transmission Elimination Amsterdam

Improved identification and early treatment of both acute and chronic HIV infection to improve prognosis for the individual, and reduce HIV transmission in Amsterdam.

What does TasP mean?

- Tasp stands for more than the use of antiretroviral treatment (cART) to prevent onward transmission of HIV.
- First and foremost it stands for prevention of HIV-related morbidity and mortality in HIV-infected persons.

Amsterdam

Treatment as Prevention (TasP)
Functional Cure
Pep
Prep
Proactive GPs
Why start treatment early?

• Biological plausibility
• Overwhelming evidence that it increases survival
• No immune reconstitution syndrome
• Reduces TB incidence

And….

• It may lead to a “functional cure” in a subset of patients who are treated during primary or acute infection.
  

• One may extrapolate from this that future strategies at curing HIV will be most successful in this particular population.

Biomedical intervention:

New prevention strategies

• Pre-exposure prophylaxis:
  
  Daily combination of two antiretrovirals protects against HIV
  
  iPrEX study (MSM): 44% protection
  
  Partners Prep: 75% protection

• Immediate Post-exposure prophylaxis (iPEP):
  
  Home package PEP with self HIV test. After risk incident immediate start with PEP. Within 5 days GGD consultation for HIV test and prescription
  
  Innovative way of PEP distribution, with less barriers to start (disclosure etc)
  
  GGD Amsterdam
Intended outcomes Demonstration Project

• Primary outcome
  Feasibility of offering an integrated package including biomedical prevention interventions

• Secondary outcomes
  Security and risk compensation:
  Risk behavior, side effects, STI incidence, viral resistance
  Effectivity:
  Adherence, case-holding, HIV diagnoses

Pep and Prep

• Biomedical intervention demonstration project is a project on the prevention side of the H-team.

• In high risk group the use of proven effective interventions:
  - Pre-exposure prophylaxis
  - Immediate post-exposure prophylaxis

• In an innovative concept in which these two interventions are combined to enable to apply a tailor-made prevention

Proactive GPs

Test strategies and provider initiated testing and counseling in Amsterdam

GPs Amsterdam, Soa Aids Nederland, GGD, HIV specialists and AidsHealthCareFoundation

One of several strategies

HIV testing strategies
  - Intervention: active HIV testing by GPs
  - Opting out HIV testing at STI clinics
  - Testing if indications complaints (first aid and other clinics)
  - Community based outreach testing
  - Patient initiated testing

H-team collaboration
  - Provides an opportunity in Amsterdam
  - To align these strategies among others during annual HIV test week

Amsterdam

GP’s in Amsterdam do many STI consultations (compared to rest of the country 50-70%),

GP’s see yearly 75% of the adult Amsterdam population

But still miss many opportune moments to test for HIV (fever like symptoms, mononucleosis like complaints, herpes zoster at young age, STI’s) treatment delay,

Some clinics many migrants with undiagnosed HIV

Amsterdam

GP’s in Amsterdam should be more proactive in testing

In Amsterdam concentrated epidemic
  - general population < 1%
  - risk groups 5%

Positive tested
  - in GP clinics 33 %
  - GGD 33 %
  - hospitals 33 %

30% of the GPs do not follow NHG SOA standard
• **Risks or risk behavior?**

It remains difficult to shave all the MSM over a ridge, about 50 percent is either monogamous or adheres consistently to the safe sex advice.

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**Risk groups**

- MSM
- FSW
- Visitors of sex workers
- People from HIV endemic area’s (first and second generation)
- Individuals with multiple sexual partners
- Partner of risk group

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**Importance of risk-based / indicator-guided testing:**

- Consider HIV
- Unexplained fever
- Night sweats
- Weight Loss
- Chronic skin problems
- Oral or vaginal candida infections
- Progressive dyspnea
- Persistent diarrhea
- Lymphadenopathy
- Polyneuropathy
- Thrombocytopenia / leukopenia
- Proteinuria / nephrotic syndrome

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**Think of HIV when chronic skin problems**

- Persistent furunculosis
- Persistent seborrheic dermatitis
- Recurrent herpes infections
- Mollusca contagiosa
- Progressive condylomata acuminata
- Shingles
- Extended scabies

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**55,000 patients in six GP clinics**

- Special consultations by nurses and/or physician assistant
- Proactive at risk groups

**NICE guideline UK**

- If prevalence > 2/1000
  - All first visits to GP lab test including HIV
  - For all general lab tests also discuss an HIV test
Objectives

Decrease the percentage of people unaware of his / her positive HIV status

Increase in number of early and acute detected HIV infections.

Intended Outcome

Increase the number of performed HIV testing in GP clinics

Upscale of "community based testing" in high-risk groups,

Increase in the number of detected HIV infections (acute and chronic)

Increase in CD4 count at first diagnosis of HIV infection

Communication Campaign acute infection

Acquiring knowledge about acute HIV infection.

Motivation and skills to recognize and tackle timely acute HIV infection

Intended behavioral objectives:
Test when acute HIV infection is suspected
Be treated for an acute HIV infection

GGD, AMC

Outcome acute infection

• Explorative study
• Reach of functional cure
• On basis of viro-immunological parameters and developments in other studies / other therapeutic interventions.

AMC Dep of Infectious diseases

TasP Curacao proposal

HIV test (rapid test, OraSure saliva test if necessary):
Once annually at all sexually active patients in the practice (PICT).
Possibly more often in risk groups
Always when symptoms of acute HIV infection.
When clinical symptoms of possible chronic HIV infection.
Curacao

HIV positives:
- Information of early treatment
  - Own health (prevention of hiv related morbidity and mortality)
  - Prevention of transmission
  - Partner involvement/ testing
  - Test CD4+ cell count, plasma viral load (pVL): all other tests ‘routine’
  - HIV patients (CBC, renal and liver functions, lues, HBV, HCV)
  - When CD4+ cell count < 200/µL, (or clinical signs) referral to internal medicine, OI profylaxis, start with cART
  - When CD4+ cell count ≥ 200/µL: start cART (if patient agrees) Atripla®, discuss alternatief regime with internal infectious disease specialist
  - Adherence-counseling and Adherence support
  - Controls of HIV positives that postpone treatment

Monitoring:
- Return immediately when intolerant to medication and/or rash
- 2 weeks pVL if no drop in VL, adherence check, possible resistance and safety parameters: CBC, creatinine and liverenzymes.
- 3 months pVL, CD4+ and safety parameters.
- 6, 9, 12 months: pVL, safety parameters
- When pVL < 50 copies/mL and good adherence, frequency of pVL every 6 months. Also for safety parameters, check creatinine tenofovir, as well for HIV-associated neuropathy

GPs Curacao

1357 people tested resulted in 2 HIV positives

A collaborative program 2015?
HIV transmission elimination in Amsterdam and Curacao
H-team and H-tec?