

Global Health in Amsterdam

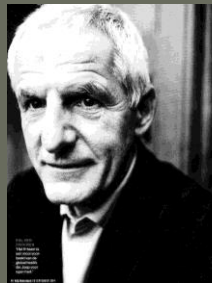
8 November 2014
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Health[e]Foundation



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)

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Netherlands

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

In Amsterdam	17 %
Outside the main cities	47%
Untited States	21%
United Kingdom	28%

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Entry into care in the Netherlands

43% late into care 2012

26% entry into care with advanced HIV disease

Delay in treatment initiation

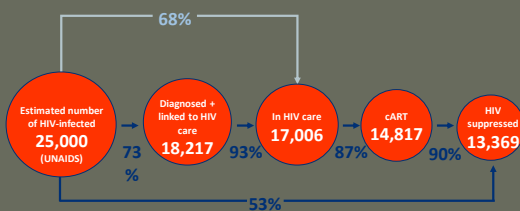
Median CD4+ cell count at entry into care 390/mm³ in 2012.

320/mm³ at the start of cART.

Knowledge of HIV status

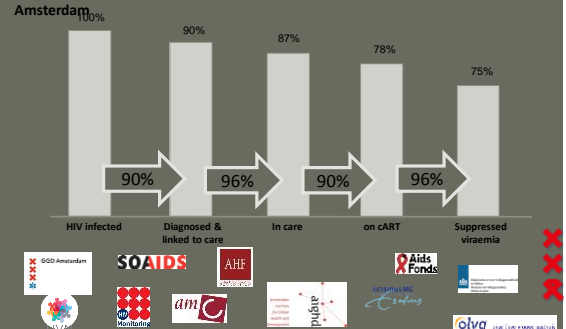
- Approximately 7000 people with HIV infection unaware
- These are estimated to be responsible for the majority of new infections

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



Amsterdam

Treatment as Prevention (TasP)

Functional Cure

Pep

Prep

Proactive GPs

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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.

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.

Saez-Cirion A, et al. PLoS Pathog 2013; Persaud D, et al. CROI 2013; Ananworanich J, et al. CROI 2013

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

Antiretroviral prophylaxis: a defining moment in HIV control

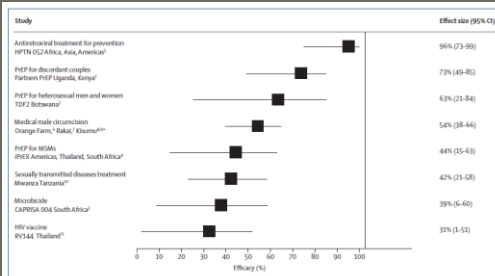


Figure: HIV prevention technologies shown to be effective in reducing HIV incidence in randomised controlled trials**
**PEP=Pre-exposure prophylaxis. *Meta-analysis of circumcision trials.

Antiretroviral
HIV-1
KwaZulu-Natal
Orange Farm

www.thelancet.com Vol 378 December 17/24/11, 2011

Biomedical intervention: New prevention strategies

Pre-exposure prophylaxis:

Daily combination of two antiretrovirals protects against HIV

iPrEX studie (MSM): 44% protection

Partners Prep: 75% protection

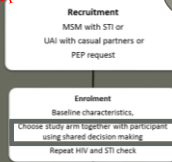
Immediate Post-exposure prophylaxis (iPEP):

Home package PEP with self HIV test. After risk incident immediate start with PEP. Withing 5 days GGD consultation for HIV test and prescription
Innovative way of PEP distribution, with less barriers to start (disclosure etc)

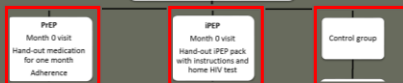
GGD Amsterdam

Biomedical intervention demonstration project

Inclusion:
September 2014- March 2017
Medication:
From inclusion till December 2017
Follow up:
till July 2018

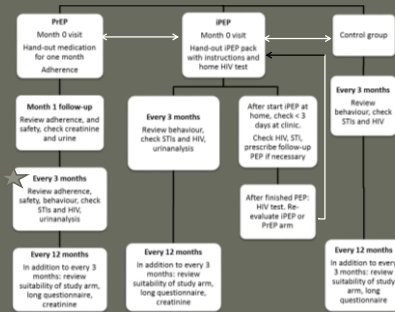


Risico op HIV:
3,7-6,7 per 100
person years



Numbers 250 120 250

Follow up scheme



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, HIVspecialists and AidsHealthCareFoundation

One of several strategies

HIV testing strategies

Intervention: active HIV testing by GPs

Opting out HIV testing at STI clinics

Testing if indicator 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 tot test for hiv (flew 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



Amsterdam

- **Risk 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.

Amsterdam

- **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

Amsterdam

Importance of risk based / indicator guided testing:

GP clinics in South East Amsterdam:

75% of hiv positive tested visited the clinic during the previous year

58% of hiv positive tested visited the clinic in the last five years with indicator complaints/ diagnoses

Amsterdam

Importance risk based / indicator guided testing:

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

Amsterdam

Think of HIV when chronic skin problems

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

Amsterdam

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

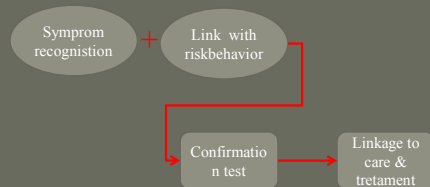
Acquiring knowledge about acute HIV infection.

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

acute infection campaign Cognitive behavioral process



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

Curacao

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/ μ L (or clinical signs) referral to internal medicine, OI prophylaxis, start with cART
- When CD4+ cell count \geq 200/ μ L: start cART (if patient agrees) Atripla®, discuss alternatief regime with internal/ infectious disease specialist (horline)
- Adherence-counseling and Adherence support
- Controls of HIV positives that postpone treatment

Curacao

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-geassociated nephropathy

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 ?