CONTROLLING THE HIV EPIDEMIC WITH ANTIRETROVIRALS

Having the Courage of Our Convictions

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From home-based testing to ART

Implementation lessons: ANRS 12249 TasP in South Africa

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Main hypothesis (formulated in 2010)

Universal Test and Treat

i.e. HIV testing of all adult members of a community, followed by immediate ART initiation of all of those identified as HIV-infected (regardless of immunological or clinical staging)

will prevent onward transmission and reduce HIV incidence in this population
ANRS 12 249 TasP trial design

• Cluster randomized trial
  – Cluster = a population of approx. 1,250 adults (16+ years)

• In all clusters, rounds of **home-based HIV testing** repeated every ~ 6 months

• All HIV+ identified participants are referred to local TasP clinics (at least one clinic per cluster)

<table>
<thead>
<tr>
<th>Control clusters</th>
<th>Intervention clusters</th>
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</thead>
<tbody>
<tr>
<td>ARV treatment according to South African guidelines (&lt;350 CD4 or WHO stage 3 or 4) (since Jan. 2015, &lt;500 CD4)</td>
<td>ARV treatment regardless of CD4 or clinical staging</td>
</tr>
</tbody>
</table>
Where the trial takes place
Hlabisa
Hlabisa - Understanding the context

• Rural area with scattered housing

• One of the poorest areas in South Africa
  → 2011 national census: 43 % unemployment

• Migration ++ to cities (studying, work, …)
Hlabisa sub-District
Descriptive epidemiology of HIV infection

- Prevalence in 2011: \( >29 \% \) among the 15-49 years old

- Important disparities by age and gender

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Female (%)</th>
<th>Male (%)</th>
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</thead>
<tbody>
<tr>
<td>15-19 yrs</td>
<td>14.7 %</td>
<td>7.0 %</td>
</tr>
<tr>
<td>20-24 yrs</td>
<td>26.5 %</td>
<td>10.2 %</td>
</tr>
<tr>
<td>25-29 yrs</td>
<td>38.3 %</td>
<td>16.0 %</td>
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<tr>
<td>30-34 yrs</td>
<td>47.1 %</td>
<td>27.3 %</td>
</tr>
<tr>
<td>35-39 yrs</td>
<td>50.4 %</td>
<td>32.0 %</td>
</tr>
<tr>
<td>40-44 yrs</td>
<td>49.1 %</td>
<td>35.8 %</td>
</tr>
<tr>
<td>45-49 yrs</td>
<td>50.3 %</td>
<td>39.1 %</td>
</tr>
</tbody>
</table>

(Zaidi et al, 2013)
HOME-BASED HIV TESTING

What is it? Why? How?

Some lessons learnt in the ANRS 12249 TasP trial: feasibility, acceptability and subsequent linkage to care
Home-based HIV testing

Principles

- To offer rapid HIV testing at home to all adult members residing in a community by dedicated counsellors
Home-based HIV testing
Is it appropriate for implementing and evaluating a TasP intervention?

• Recommended by WHO to increase the HIV testing coverage, especially when:
  – Prevalence of HIV is high
  – Access to HIV counselling and testing services is sub-optimal
    • Hlabisa:
      – Rural area → difficulties to access all health services
      – HIV test often but not systematically proposed in primary health care services
• Home-based testing already introduced and evaluated in 2009-2011 by local authorities. Good acceptance by the population.
  – Maheswaran et al, JAIDS 2012
Home-based testing
Specificities in the context of the TasP trial

• Repeat offer of HIV testing
  – At home
  – Every six months
  – To all adults \( \geq 16 \) years residing in the study area
  – By counsellors trained for and by the trial

• In parallel, biomedical and social science data collection at each survey round for research purposes by trial staff:
  – Blinded DBS (Dry Blood Spot) to estimate HIV incidence in the population
  – Socio-demographic and economic questionnaires
Home-based HIV testing
What have we learnt within the TasP trial based on data collected in 2012-2014?

1. This home-based approach is quite acceptable

   Poster
   Larmarange et al
   (R4P 2014)

2. Referring those identified HIV+ to clinics is not a straightforward exercise

   Oral presentation
   Plazy et al
   (IAS 2015)
Home-based HIV testing is acceptable in TasP

- Eligible population: 12,894
- 25% could not be contacted
  - Limited demographic data and reasons remain largely unknown
- Good acceptance of home-based HIV testing by those ever contacted:
  - At first contact: ≈ 77%
  - At second contact:
    - Among those HIV-neg at first contact: >85% → repeat testing
    - Among those who had refused the first contact/test: >47%

- Good opportunity to re-identify those already known as HIV-pos to offer them a second chance to refer them to clinic
  - ≈ 30% of the HIV-pos had already been diagnosed and half of them had used at least once the local HIV program
Home-based HIV testing provides partial opportunities to link PLWHIV into care

- Eligible population: 1,323 individuals identified HIV+, had never been in care before, and now referred to clinic
  - Followed up ≥3 months and not deceased

- <38% will use a clinic at least once (TasP clinic or DoH local clinic within 3 months after having being invited for referral)

No statistical difference
- By sex
- By study arm

Those who link the least:
- <30 years
- Students
- DNK HIV-pos in the family
- No history of referral
- Distance to clinic >1km
What is the contribution and limits of a strategy starting by home-based HIV testing to reach the first 90 and ultimately the 90 x 90 90 UNAIDS targets?
Discussion & Conclusions (1)

- Home-based HIV testing has clear advantages and provides benefits
  - Well accepted by this population (>77 %%)
  - Allows the re-identification of HIV+ individuals previously diagnosed but not in care (never before or who dropped momentarily)

→ An efficacious intervention that will maximize the number of PLWHIV aware of their status and is likely to be necessary … but this is not the magic bullet
• Home-based HIV testing suffers some limitations

  – 25% of the « residents » remain uncontacted

    → More testing services should be available at any point in time in the community (mobile testing is one of them)

  – Linkage to HIV care within a reasonable time window remains sub-optimal after repeat home-based HIV testing is offered as a central testing strategy (<40% within 3 months after referral)

    → Need to put in place at large scale and evaluate a comprehensive combination of interventions proven independantly to contribute to the 90 X 90 X strategy (mobile telephones and SMS reminders, community health workers and peer navigators, home-based ART initiation, …)
GUIDELINE ON WHEN TO START ANTIRETROVIRAL THERAPY AND ON PRE-EXPOSURE PROPHYLAXIS FOR HIV

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Ngiyabonga! Merci!

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- Trial participants

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