CONTROLLING THE HIV EPIDEMIC WITH ANTIRETROVIRALS

From Consensus to Implementation

22-24 September 2013
Queen Elizabeth II Conference Centre, London
Poster rapporteur session
The top 3 abstracts

Sarah Fidler
Imperial College London
Summary of the next 30 minutes

- All abstracts were reviewed by the organising panel and the top 3 were chosen for detailed presentation and discussion
- Initial summary of abstracts
- Discussion with the study PIs
Abstract # 23
Peter MacPherson (presenting), David Laloo, S. Bertel Squire, Augustine Choko, Simon Makombe, Nicola Desmond, Deus Thindwa, Joep van Oosterhout, Miriam Taegtmeyer, Emily Webb, Richard Hayes, Elizabeth L. Corbett

• Home Initiation of HIV Care Following Self-Testing: A Cluster-Randomized Trial in Blantyre, Malawi
Background/Research Question

- HIV self-testing (HIVST) offers new opportunities to increase on current suboptimal population rates of HTC
  - High uptake (92%) and accuracy in Blantyre\(^1\)
  - However, little is known about linkage into HIV care following HIVST

- In the context of introduction of home-based HIVST, what is the impact of home initiation of HIV care on:
  - Population uptake of ART
  - Uptake of HIVST
  - Willingness to report positive HIVST results
  - 6-month cohort outcomes

Methods

14 Clusters
HIV self-testing

Availability of facility-based HIV care
Confirmatory HTC, CD4, WHO stage, TB screen, IPT
Referral for ART initiation if eligible

Optional home initiation of care arm
Disclosure of positive HIVST result to counsellor

7 Clusters
Facility-based HIV care OR
Optional home initiation of HIV care
• 2-weeks of home ART if eligible

7 Clusters
Facility-based HIV care alone

6-month Endpoint Ascertainment
All adult cluster resident ART initiations recorded from 3 health facilities

Facility initiation of care only arm

HIV
CONTROLLING THE HIV EPIDEMIC WITH ANTIRETROVIRALS
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Study Design

- Cluster randomised trial
- Adult residents of 14 urban neighborhoods in Blantyre
- Total adult population: 16,660
- Adult HIV prevalence: 18%\(^1\)
- Facility-based HIV care
  - 2 PHCs
  - 1 tertiary hospital
- Randomised 1:1 at community meeting
# Results

<table>
<thead>
<tr>
<th></th>
<th>OHC arm (n=8194)</th>
<th>FCO arm (n=8466)</th>
<th>Risk ratio</th>
<th>95% CI</th>
<th>k</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary outcome</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART initiations</td>
<td>181</td>
<td>63</td>
<td>2.94</td>
<td>(2.10-4.12)</td>
<td>0.15</td>
</tr>
<tr>
<td><strong>Secondary outcomes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIV self-tests</td>
<td>5287</td>
<td>4433</td>
<td>1.23</td>
<td>(0.96-1.58)</td>
<td>0.23</td>
</tr>
<tr>
<td>Reporting of +ve HIVST results</td>
<td>490</td>
<td>278</td>
<td>1.86</td>
<td>(1.16-2.97)</td>
<td>0.50</td>
</tr>
</tbody>
</table>
Home initiation of HIV care after HIVST significant increased population uptake of ART

Percentage of all adult residents who initiated ART

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optional home initiation after HIVST</td>
<td>1.4%</td>
</tr>
<tr>
<td>Facility initiation after HIVST</td>
<td>0.7%</td>
</tr>
<tr>
<td>No HIVST</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

RR: 2.94 (2.10-4.12)

MacPherson et al: CROI 2013
6-month Cohort Outcomes

- Retained: 76%
- Retained: 71%

Graph showing the probability of retention on ART over days since ART initiation.
Conclusions

• The option of home initiation of HIV care during an HIVST intervention substantially and significantly increased ART initiation and reporting of positive HIVST results.

• Uptake of HIVST was high (58%) over 6 months
  – High potential to increase uptake of HTC

• Careful monitoring and support for home initiators is required to avoid losing the initial population benefit.
Abstract #5

Option B+ as part of test and treat strategy for Pregnant & lactating women – Lessons learnt after 1 year of implementation in Malawi

Dr Zengani Chirwa; Dr Frank Chimbwandira; Dr Andreas Jahn
Background

• Malawi started implementing Option B+ from July 2011
• This approach has not yet been implemented elsewhere
• Malawi recognises the importance of documenting achievements and lessons learnt to guide resource limited countries transitioning from Options A/B to B+

• Objectives:

• To investigate the proportion of pregnant and breastfeeding women who initiate and remain on ART before and after Option B+ implementation
Methods

Report of program data

• Monitoring of ART programs across whole country using National M&E supportive supervision visits from every ARV clinic (672)
• Quarterly reports: Cohort analysis including drug HIV “commodities”
• Comparison between period pre-Option B+ Jan- June 2011 vs Post option B+ Jan-June 2012
Implementation of Option B+
Results

Uptake of ART through ANC services

- **Pre Option B+ (Jan-Jun 2011)**
  - 2,398 pregnant & lactating women initiated ART
  - 18,000 population in total initiated ART per quarter

- **Post Option B+ (Jan-June 2012)**
  - 15,973 pregnant & lactating women initiated on ART (TDF/3TC/EFV)
  - 30,000 population initiated ART per quarter
  - 79% of women on option B+ were retained alive on ART at 12 months
### Results: Reasons for ART initiation

<table>
<thead>
<tr>
<th></th>
<th>Jan-Jun 2011 (Old ART and PMTCT guidelines)</th>
<th>Jan-Jun 2012 (New integrated guidelines) Option B+</th>
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<tbody>
<tr>
<td>Pregnant women</td>
<td>2,398</td>
<td>13,575</td>
</tr>
<tr>
<td>Breastfeeding women</td>
<td>0</td>
<td>7,176</td>
</tr>
</tbody>
</table>
Sustainability

• A National clinical mentoring programme has been established and 350 mentors have been trained at district level to support the providers in the implementation of the integrated guidelines at site level

• A national M& E system is in place with 20 teams going out to every one of the 652 sites to collate & collect data, conduct cohort analysis, support supervision and stock taking for HIV commodities (including ARV’s & test kits) every quarter to ensure accurate and timely data for quantification and forecasting of HIV commodities
Lessons learnt

• ART initiation and follow up for pregnant women should be conducted within the Maternity & ANC services to reduce LTFU until after delivery

• Most of the LTFU (20%) never came back after the ART initiation visit and many of these may never have started ART (uptake vs retention). Reasons cited for none initiation, stigma, violence, rejection by partners
Conclusion

• Option B+ has led to a dramatic increase (700%) in ART uptake amongst HIV infected pregnant & lactating women
• 79% of women on option B+ were retained alive on ART at 12 months
• Issues of LTFU need to be addressed in HIV infected pregnant women initiating ART in ANC/Maternity
Abstract # 65
Community Perspectives on using ARVs for Treatment and Prevention:
A Multi-Country e-Consultation to Inform the 2013 WHO Guidelines on the Use of Antiretroviral Drugs for Treating and Preventing HIV Infection
Background:
Community Consultation Nov-Dec 2012

• International HIV/AIDS Alliance and GNP+ commissioned by WHO to establish values and preferences and recommendations to inform Consolidated 2013 ARV Guidelines.

• Community Consultation to this level had not been previously undertaken, it included:

• A 4 week E-Discussion, **E-survey** and Focus Group Discussions (in Malawi and Uganda around Option B+)
### Methods

**Online questions relating to the use of ARVs for treatment and prevention**

Respondents were identified through existing community networks

<table>
<thead>
<tr>
<th>Topic</th>
<th>Question</th>
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</table>
| ART for treatment and prevention      | • In your view, which groups of people living with HIV should have the option to start ART regardless of their CD4 cell count for treatment and prevention?  
                                       | • What must be addressed to ensure successful ART programming?                                                                 |
| Pre-Exposure Prophylaxis (PrEP)       | • Which groups of people who are currently HIV negative should have the option to use PrEP?                                             
                                       | • What are the main potential barriers to accessing PrEP?                                                                               |
Demographics of Respondents:

**E-survey:**

- 122 countries, 6 languages, 1088 respondents, 59% middle income country
- 38% female, 61% male, 1% transgender (n=791)
- Median age range: 35-44 years old (n= 280)
- 431 identified as a person living with HIV
- 489 identified with a key population
Results

• 51% support offering ART initiation to people living with HIV (PLHIV) whose CD4 cell count is below or equal 350-500 cells/mm$^3$ (n=696)

• Offering ART to people living with HIV regardless of CD4 cell count:
  – 48% support this for PLHIV with co-infections (TB, HBV, HCV) (n=696)
  – 63.3% for PLHIV in sero-discordant relationships (n=452)
  – 42.5% for WLHIV of reproductive age (n=452)
  – Key populations – most frequently selected: sex workers (55.8%) and men who have sex with men (52.5%) (n=452)

There were no statistically significant differences by HIV status or country income level
<table>
<thead>
<tr>
<th>Challenging access barriers</th>
<th>Barriers most frequently selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stigma &amp; discrimination around HIV status</td>
<td>55.8%</td>
</tr>
<tr>
<td>Anticipated reaction from your close family, spouse or other sexual partner</td>
<td>43.3%</td>
</tr>
<tr>
<td>Concern about side effects of ARVs</td>
<td>43%</td>
</tr>
<tr>
<td>Lack of confidentiality and privacy</td>
<td>37.9%</td>
</tr>
<tr>
<td>Anticipated reaction from boss, supervisor, or work colleagues</td>
<td>33.6%</td>
</tr>
<tr>
<td>Anticipated reaction from friends and acquaintances</td>
<td>32.4%</td>
</tr>
<tr>
<td>Anticipated reaction from health care workers</td>
<td>32.1%</td>
</tr>
<tr>
<td>Stockouts of ARVs</td>
<td>31.8%</td>
</tr>
<tr>
<td>Criminalization of people living with HIV</td>
<td>31.8%</td>
</tr>
<tr>
<td>Lack of knowledge about benefits of being on ART</td>
<td>31.8%</td>
</tr>
<tr>
<td>Stigma &amp; discrimination because part of a marginalised (key) population</td>
<td>30.6%</td>
</tr>
<tr>
<td>Lack of evidence on effects of long-term ART</td>
<td>30.6%</td>
</tr>
<tr>
<td>Cost of travel to clinics</td>
<td>30.3%</td>
</tr>
<tr>
<td>Lack of locally-available laboratory tests for viral load</td>
<td>29.4%</td>
</tr>
<tr>
<td>Lack of locally-available laboratory tests for CD4 count</td>
<td>28.2%</td>
</tr>
<tr>
<td>Lack of Information about ARVs</td>
<td>28.2%</td>
</tr>
<tr>
<td>My CD4 Count is still above the threshold</td>
<td>27%</td>
</tr>
<tr>
<td>Cost of ARVs</td>
<td>24.5%</td>
</tr>
<tr>
<td>Stigma &amp; discrimination around being pregnant when living with HIV</td>
<td>20.9%</td>
</tr>
<tr>
<td>Anticipated reaction from faith community</td>
<td>20%</td>
</tr>
<tr>
<td>Lack of up-to-date country guidelines on when to start ART</td>
<td>18.5%</td>
</tr>
</tbody>
</table>
Figure 2. Groups that should be offered pre-exposure prophylaxis (n=417)

<table>
<thead>
<tr>
<th>Population group</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex workers</td>
<td>64%</td>
</tr>
<tr>
<td>Men or women who are not in a position to negotiate safer sex</td>
<td>62.1%</td>
</tr>
<tr>
<td>Women or men who are potential victims of gender based violence</td>
<td>60.2%</td>
</tr>
<tr>
<td>Men who have sex with men</td>
<td>60.2%</td>
</tr>
<tr>
<td>Adolescent girls or boys (10-19) who are potential victims of gender-based violence</td>
<td>51.1%</td>
</tr>
<tr>
<td>People who use drugs</td>
<td>46.8%</td>
</tr>
<tr>
<td>Young women in high HIV prevalence settings</td>
<td>45.6%</td>
</tr>
<tr>
<td>Prisoners</td>
<td>31.2%</td>
</tr>
<tr>
<td>Transgender women</td>
<td>29%</td>
</tr>
<tr>
<td>Transgender men</td>
<td>25.7%</td>
</tr>
<tr>
<td>Refugees and internally displaced people</td>
<td>20.6%</td>
</tr>
<tr>
<td>Migrants</td>
<td>18.7%</td>
</tr>
</tbody>
</table>

Respondents identified stigma, discrimination and the cost of PrEP as critical access barriers.
Conclusion

• Broad community support for earlier ART initiation (with the proviso that the newer regimens are simpler to take and safer)

• Targeted ARV use for treatment and prevention is acceptable, but successful ART programming requires:
  – A rights-based approach
  – A comprehensive intervention package prioritised by people living with HIV and other affected communities

**Limitations:** non-random sampling, Internet access, optional questions affecting statistical analysis
Acknowledgements

We thank all participants of the consultation for their collaboration in data collection.

We thank the consultation working group members who reviewed consultation instruments and interim reports.

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