Micro-elimination of Hepatitis C amongst people living with HIV (PLHIV) in Punjab, India.

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Foundation for Innovative New Diagnostics (FIND), New Delhi, India
IVHEM, Amsterdam, 22-23 November 2019
Hepatitis Elimination Through Access to Diagnostics (HEAD-Start)

Georgia:
- **Settings:**
  - Harm Reduction Sites
  - National Reference Laboratory
- **Activities:**
  - Decentralization of testing
  - Comparison study cAg as test of cure
  - Simplification of testing algorithm
  - Integration of HCV VL in existing decentralized testing platforms

India, Manipur:
- **Settings:**
  - Integrated Care Centers for ARV services in PWIDs
- **Activities:**
  - Decentralization of HCV care at community level

India, Punjab:
- **Settings:**
  - Primary and Secondary facilities
- **Activities:**
  - Decentralization of HCV diagnosis at ART clinics at District Hospitals

India, Delhi:
- **Settings:**
  - Primary facilities and district hospitals
- **Activities:**
  - Hub-spoke model with decentralized screening and centralized confirmation

Myanmar:
- **Settings:**
  - Drug Treatment Center and community-based clinic
  - National Reference Laboratories
- **Activities:**
  - Integration of testing (RDTs and POC) in decentralized settings
  - Optimization of existing polyvalent central platforms

Malaysia:
- **Settings:**
  - Secondary and primary facilities to support DNDi phase 3 trial and MOH NHP
  - National Reference Laboratory
- **Activities:**
  - Hub-spoke model with decentralized screening and centralized confirmation
An estimated 12-18 million people in India are living with HCV infection.

In 2018, the Government of India launched the National Viral Hepatitis Control Program (NVHCP) recognizing HCV as a key disease that requires urgent attention.
Background: Punjab hepatitis program

The National Viral Hepatitis Control Program (formerly Mukh Mantri Punjab Hepatitis C Relief Fund)

- Started in year 2016,
- screened over 1,06,360 general population
- initiated over 73,625 people on treatment in just three years of operation, with 93% cure rate.

The Punjab State provided HCV response; all services free to the patient

- HCV screening and care are offered in 22 district hospitals and 3 Government Medical Colleges.
- Screening using EIA
- Confirmation is done by RNA at private labs through public/private partnership model

The government program has been effective in scaling up HCV care in general population

- Partnered with FIND to expand to reach key populations
Operational project conducted in partnership with Punjab MoH

Project launched in October 2018

Introducing HCV care into 13 existing ART centres / Hub and spoke model

- Simplifying the HCV algorithm by introducing RDTs
- Reflex RNA testing of those who screen HCV positive by sample referral from ART centers to 4 Xpert testing hubs
## HEAD-Start Punjab sites

**Table: Head Start Sites**

<table>
<thead>
<tr>
<th>Site name</th>
<th>Population of district (2018)</th>
<th>PLHIV attending for care at ART clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART Amritsar</td>
<td>26,71,290</td>
<td>4,842</td>
</tr>
<tr>
<td>ART - Tarn Taran</td>
<td>12,01,374</td>
<td>1,698</td>
</tr>
<tr>
<td>FI-ART CH Batala</td>
<td>17,78,685</td>
<td>1,038</td>
</tr>
<tr>
<td>ART - Bathinda</td>
<td>14,89,674</td>
<td>3,155</td>
</tr>
<tr>
<td>ART - Faridkot</td>
<td>6,43,353</td>
<td>1,202</td>
</tr>
<tr>
<td>ART - Firozpur</td>
<td>20,26,831</td>
<td>1,691</td>
</tr>
<tr>
<td>FI-ART CH Moga</td>
<td>10,57,729</td>
<td>1,300</td>
</tr>
<tr>
<td>ART - Hoshiarpur</td>
<td>16,97,685</td>
<td>1,142</td>
</tr>
<tr>
<td>ART - Jalandhar</td>
<td>23,40,123</td>
<td>4,000</td>
</tr>
<tr>
<td>ART - Pathankot</td>
<td>6,71,443</td>
<td>1,325</td>
</tr>
<tr>
<td>FI-ART CH Ropar</td>
<td>7,32,952</td>
<td>840</td>
</tr>
<tr>
<td>ART - Patiala</td>
<td>20,29,640</td>
<td>5,990</td>
</tr>
<tr>
<td>ART - Ludhiana</td>
<td>37,41,062</td>
<td>3,828</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,20,81,841</strong></td>
<td><strong>31,977</strong></td>
</tr>
</tbody>
</table>

*Figure 1. HEAD-Start sites in Punjab: HCV testing, hub-and-spoke model*
Trainings conducted

**June 2018**
Induction training in 4 central sites
138 people trained (project LTs, SLTs, ART staff – SMO, counsellor, DEO, staff nurse, pharmacists)
Hospital staff – epidemiologist)

**Dec 2018**
Review and refresher training
13 LTs
4 SLTs trained

**May 2019**
Feedback and re-orientation training
13 LTs
4 SLTs trained

**Sept 2019**
Induction on integration of HCV services into OST centers
132 staff trained, Project LTs, SLTs, OST staff – SMO, counsellor, DEO, staff nurse, pharmacists)
84% of the PLHIV attending ART clinic were screened for HCV.

98% of the RDT positive were linked to the GeneXpert sites for confirmatory tests.
## Punjab turnaround times

<table>
<thead>
<tr>
<th>Step</th>
<th>RDT screening to VL sample collection</th>
<th>VL sample transport time</th>
<th>VL testing time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (days)</td>
<td>0.16</td>
<td>0.23</td>
<td>1</td>
</tr>
<tr>
<td>SD (days)</td>
<td>1.64</td>
<td>1.86</td>
<td>1.81</td>
</tr>
<tr>
<td>n</td>
<td>1197</td>
<td>1163</td>
<td>1197</td>
</tr>
</tbody>
</table>

Day 1: Screening and VL sample collection

Day 2: VL sample Transport

Day 3: VL testing and reporting
Conclusions

- Integrating HCV testing and care into ART clinics
  - Increases access to HCV care
  - 84% of the PLHIV attending ART clinics eligible for screening were reached

- Reflex testing:
  - Making the journey as simple as possible for the patient
  - Evidenced by the 98% linkage between RDT test and VL test

- Bridging the space between separate programs requires planning and close cooperation.

- Measures that should be taken to increase the treatment initiation rates:
  
  Coordination meeting between the National Viral Hepatitis Control Program and the National AIDS Control Program nodal officers meeting (held on 15th Nov 2019)
We believe
Simple, rapid, robust and affordable diagnostic solutions bring game-changing possibilities above and beyond their immediate benefit.

We believe
Our work can spark real progress in the health of lower and middle income countries and their populations.

We believe
With improved health comes greater hope: individuals empowered to support their families, revive businesses, and thrive in school.

Thank you / Hartelijk dank