Decentralized and simplified HCV care in Delhi

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Introduction

- An estimated 12–18 million people are infected with Hepatitis C Virus (HCV) in India, accounting for a significant proportion of the global HCV burden.

- In order to meet the ambitious 2030 targets for global reduction in hepatitis-related mortality by 65% and new infections by 90%, the Government of India launched the National Viral Hepatitis Control Program in 2018.

- Accelerating the elimination of Hepatitis C globally is not possible without increasing the access to testing services.

**Objective:**
Decentralized testing services in a hub and spoke manner were initiated in Delhi, India as a pilot model.
Methodology

Arm 1: Hospital Screening
- n = 5 Hospitals
- RDT Screening at hospitals
- Sample collected from HCV Ab+ and sent same day to ILBS
- Confirmatory testing at central lab (ILBS)

Arm 2: Partially decentralized screening
- n = 15 polyclinics
- RDT screening at polyclinics
- Patient referred to hospital for confirmatory tests-sample collection
- Confirmatory testing at central lab (ILBS)

Arm 3: Outreach Screening
- RDT at screening camps
- Patient referred to hospital for confirmatory tests-sample collection
- Confirmatory testing at central lab (ILBS)
Inclusion criteria
- All adult patients attending the general OPD with common ailments
- Medicine
- Dental
- Dermatology (Skin & Venereal Disease)
- Obstetrics & Gynecology (Non anti-natal & pre-natal care)
- Orthopedics
- Ophthalmology
- Ear, Nose and Throat
- Surgery

Exclusion criteria
- Children up to 18 years
- Breastfeeding or Pregnant women
- Patients with Chronic Kidney disease

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Polyclinics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Maharishi Valmiki</td>
<td>Punjabi Colony</td>
</tr>
<tr>
<td></td>
<td>Rohini Sec 18</td>
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<tr>
<td></td>
<td>Rohini Sec 4</td>
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<tr>
<td>2 Sanjay Gandhi</td>
<td>Wazirpur</td>
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<td></td>
<td>Rohini Sec 2</td>
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<td></td>
<td>Saraswati Vihar</td>
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<td>3 Deen Dayal Upadhaya</td>
<td>Tilak Vihar</td>
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<td></td>
<td>Pitampura</td>
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<td></td>
<td>Rani Bagh</td>
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<td>4 Pt. Madan Mohan Malviya</td>
<td>Basant Gaon</td>
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<td>Timarpur</td>
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<td></td>
<td>Kashavpuram</td>
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<td>5 Guru Teg Bahadur</td>
<td>Vivek Vihar</td>
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<td></td>
<td>Nand Nagri</td>
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<td>Kanti Nagar</td>
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HCV care cascade; preliminary data

- RDT screened: 38768
- RDT +: 786 (2.0%)
- HCV RNA tested: 704 (89.6%)
- HCV RNA +: 606 (86.1%)
- t/t initiated: 494 (81.5%)
- t/t completed: 435 (88.1%)
- Eligible for SVR: 407 (93.6%)
- SVR tested: 244 (60.0%)
- Cured: 235 (96.3%)
### Single site and most effective

<table>
<thead>
<tr>
<th>Site Type</th>
<th>% RNA tests</th>
<th>% Tx Initiation</th>
<th>Cumulative Cascade retention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital, direct</td>
<td>92.7%*</td>
<td>88.1%**</td>
<td>81.7%</td>
</tr>
<tr>
<td>Polyclinics, referred</td>
<td>48.4%</td>
<td>34.2%</td>
<td>16.6%</td>
</tr>
</tbody>
</table>

*p<0.001  **p=0.003

<table>
<thead>
<tr>
<th>Site Type</th>
<th>% RDT+</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Hospitals</td>
<td>3.1%*</td>
</tr>
<tr>
<td>Polyclinics</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

*p<0.001
Conclusion

• This hub and spoke model of decentralized HCV care provision at point of care (PoC) proved to be effective in resource limited Indian scenario.

• Connecting centralized lab to several peripheral sites via sample referral as compared to patient travel could help in better patient retention.

• One-point referral system to be adopted in order to retain patients in the cascade of care.

• It paves way to eliminate HCV through primary health care as PoC with existing resources in Public health settings in India.

• The results can be very helpful in guiding policies for increasing the uptake of testing at a larger scale.
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