Addressing inequity by reaching marginalised groups to improve immunization coverage - Lessons from India Polio Eradication Program for health system strengthening and universal coverage.

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Presenter Disclosures

Jitendra Bhaskar Awale

The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

I am working as consultant to CORE GROUP POLIO PROJECT INDIA and my trip for APHA is paid by the project.

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Learning Objectives

Participants will be able to describe strategies to address inequity in the immunization program by reaching marginalised/underserved groups such as nomads, migrant workers and improve the immunization systems.
Presentation Outline

• CORE Group Polio Project India
• Update on Polio Eradication Program
• High Risk Group Tracking Strategy
• Major Learnings
Methods

This presentation is based on a review of the available secondary data from Project reports and data presented at the India Expert Advisory Group (IEAG) on polio meetings by WHO-NPSP, UNICEF, GoI, etc.
THE CORE GROUP POLIO PROJECT (CGPP)

• CORE Group - A membership organization of 100+ US PVOs addressing the health of vulnerable mothers and children through community programming.

• Since 1999 USAID is funding CGPP, supplemented by BMGF. Currently working in Nigeria, Kenya, Somalia, Ethiopia, S. Sudan, Afghanistan, India and Uganda.

• Works in close collaboration with host governments, WHO, UNICEF to complement efforts in social mobilization for polio immunization, community based surveillance of Acute Flaccid Paralysis (AFP), Cross-border coordination, etc.
CGPP India at glance

- Consortium of 3 US based and 6 national NGOs coordinated by an independent secretariat.
- 1200 Mobilisers reaching half a million children in two state of India.
Update on Polio Eradication
Global Wild Poliovirus & cVDPV Cases\(^1\), Previous 12 Months\(^2\)

<table>
<thead>
<tr>
<th>Country</th>
<th>Wild poliovirus</th>
<th>cVDPV2</th>
<th>cVDPV3</th>
<th>cVDPV1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Onset of most recent case</td>
<td>Total WPV1</td>
<td>Onset of most recent case</td>
<td>Total cVDPV2</td>
</tr>
<tr>
<td>Nigeria</td>
<td>NA</td>
<td>0</td>
<td>16-Sep-18</td>
<td>17</td>
</tr>
<tr>
<td>Niger</td>
<td>NA</td>
<td>0</td>
<td>07-Sep-18</td>
<td>6</td>
</tr>
<tr>
<td>DRC</td>
<td>NA</td>
<td>0</td>
<td>05-Aug-18</td>
<td>27</td>
</tr>
<tr>
<td>AFR</td>
<td>NA</td>
<td>0</td>
<td>16-Sep-18</td>
<td>50</td>
</tr>
<tr>
<td>Pakistan</td>
<td>25-Sep-18</td>
<td>9</td>
<td>NA</td>
<td>0</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>01-Sep-18</td>
<td>20</td>
<td>NA</td>
<td>0</td>
</tr>
<tr>
<td>Somalia</td>
<td>NA</td>
<td>0</td>
<td>02-Sep-18</td>
<td>6</td>
</tr>
<tr>
<td>EMR</td>
<td>25-Sep-18</td>
<td>29</td>
<td>02-Sep-18</td>
<td>6</td>
</tr>
<tr>
<td>PNG</td>
<td>NA</td>
<td>0</td>
<td>NA</td>
<td>0</td>
</tr>
<tr>
<td>WPRO</td>
<td>NA</td>
<td>0</td>
<td>NA</td>
<td>0</td>
</tr>
<tr>
<td>Global</td>
<td>25-Sep-18</td>
<td>29</td>
<td>16-Sep-18</td>
<td>56</td>
</tr>
</tbody>
</table>

Data in WHO HQ as of 23 Oct. 2018

\(^1\)Excludes viruses detected from environmental surveillance
Last wild poliovirus cases by type, India

WPV1 13/01/2011 Howrah (WB)

WPV2 24/10/1999 Aligarh (UP)

WPV3 22/10/2010 Pakur (JH)
Location of poliovirus by type, 2011*

Wild Poliovirus
13 January, 2011
Howrah, West Bengal

Rukhsar : The Last case of polio in India

India - Certified as ‘Polio Free’ in March 2014

*data as on 03 Feb 2013
India Polio Eradication: Key actions behind success

- **Partnership** to complement capacities and sharing of resources and risks

- **Prioritization**: High risk approach guided by research and monitoring data

- **Convergence**: Immunization, Nutrition, Sanitation and Hygiene interventions

- **Social and epidemiological data** was generated and used extensively to guide program interventions (Continuous research-based innovations; Accurate, real time monitoring data on campaign quality)
Major Challenges Addressed

- Resistance to OPV due to misbeliefs about vaccine safety
- Weak immunization system
- Children missed repeatedly due to poor micro plans and poor performance of vaccination teams.
- High birth cohort, high population density, high rate of diarrhea.
- **Mobile Population – Migrant /Nomads**
WPV1 cases by migration status, 07-09*

Uttar Pradesh

- Non-migratory: 96%
- Migratory: 4%

(N=95)

Non epidemic UP*

- Non-migratory: 91%
- Migratory: 9%

(N=43)

Rest of India

- Non-migratory: 59%
- Migratory: 41%

(N=29)

*Non epidemic UP excludes Moradabad, JP Nagar, Badaun, Kanshi ram nagar, Bareilly and Rampur dists of UP:

* data as on 19 June 2009
Migrants

Brick Kilns

- Children both at the labor camps in the brick kilns as well as the “pather” fields where the bricks are prepared.

- Construction sites

- Children in labor camps at or nearby construction sites

- Laborer families in ‘jhuggy’ camps, brick sheds, and in under construction buildings

Slums

Migrants in urban/peri-urban slums
Nomads

Communities who travel from place to place for livelihoods setting up temporary home (dera’s) on empty tracks of land near railway stations, market places etc.

Often work as blacksmiths, basket weavers, puppeteers, acrobats, fortune-tellers, singers and dancers.

Nomads make up approximately 0.7% of the population in UP

Major nomadic groups:
- Kanjars
- Gadia
- Lohars,
- Nat,
- Gandhiley,
- Mangte, Ghumantoo, Fakir,
- Banjara
**Prioritization:** High risk approach guided by research and monitoring data

<table>
<thead>
<tr>
<th>SNo.</th>
<th>Criteria for Selection</th>
<th>Weightage Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Area with HRG group <em>(HR Group:N=Nomads, S=Slums only)</em></td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Area with P1 Wild Polio virus for three or more years from 2003 to 2011 in <strong>low season</strong> <em>(Feb, Mar, Apr &amp; May)</em></td>
<td>14</td>
</tr>
<tr>
<td>3</td>
<td>Area with P1 Wild Polio virus for two years from 2003 to 2011</td>
<td>14</td>
</tr>
<tr>
<td>4</td>
<td>Area with P1 Wild Polio virus once from period 2007 to 2011</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>Muslim community &gt;40% <em>(Y/N)</em></td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>Area with Compatible cases for two years <em>(2007 to 2011)</em></td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Area with Compatible cases once in <em>(2007 to 2011)</em></td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Total X generation is &gt;20% of the total houses</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>Convertible X remaining is &gt;14% of the total remaining X houses</td>
<td>12</td>
</tr>
</tbody>
</table>

**HRA Selection Criteria - UP**

HRA => 14 points
Robust High Risk Group (HRG) Tracking

1. Community mobilizer to look out for and map HRG sites.
2. Visit identified HRG sites to get demographic details.
3. Network of informers created
4. Conduct joint visits with supervisor/medical officer/WHO-NPSP for validation of information
5. Update immunization micro plans
6. Ensure that the vaccination teams visit identified sites at least twice at different time and days during polio SIAs.

7. The CGPP mobiliser visits these HRG sites before and during immunization sessions and mobilizes families for immunization of children and pregnant women.
HRG Site Mapping

Maps prepared by CGPP Mobilisers
## Special RI Sessions for Brick Kilns

**Special initiatives to incorporate migrants in regular RI microplan**

<table>
<thead>
<tr>
<th>No</th>
<th>Brick Kilns</th>
<th>Village</th>
<th>Distance from PHC</th>
<th>Owner &amp; manager of Kiln</th>
<th>ANM</th>
<th>4 monthly drives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>K.B.F.</td>
<td>खूराली/टिमकिया</td>
<td>4 km.</td>
<td>श्री सुमित गुप्ता</td>
<td>श्री नरेन्द्र</td>
<td>आशा कमारी</td>
</tr>
<tr>
<td>2</td>
<td>N.B.F.</td>
<td>खूराली/टिमकिया</td>
<td>4 km.</td>
<td>श्री नरेन्द्र</td>
<td>श्री सुमित गुप्ता</td>
<td>आशा कमारी</td>
</tr>
<tr>
<td>3</td>
<td>R.B.F.</td>
<td>खूराली/टिमकिया</td>
<td>4 km.</td>
<td>श्री सुमित गुप्ता</td>
<td>श्री नरेन्द्र</td>
<td>आशा कमारी</td>
</tr>
<tr>
<td>4</td>
<td>किसान B.F.</td>
<td>अमानुल्लाहपुर 1</td>
<td>12 km.</td>
<td>श्री अमरबीर</td>
<td>श्री बबलू</td>
<td>शरीफ, कुमारी शशी मलिक</td>
</tr>
<tr>
<td>5</td>
<td>मखान B.F.</td>
<td>अमानुल्लाहपुर 2</td>
<td>12 km.</td>
<td>श्री फकज गुप्ता</td>
<td>श्री सुजला</td>
<td>वीरू घोला अनजुला देवी</td>
</tr>
<tr>
<td>6</td>
<td>शीतल B.F.</td>
<td>सतपई</td>
<td>11 km.</td>
<td>अरुण कुमार</td>
<td>श्री बिजेन्द्र</td>
<td>शशी मलिक</td>
</tr>
<tr>
<td>7</td>
<td>जोश बी.</td>
<td>बहरामपुर</td>
<td>15 km.</td>
<td>श्री नवीन अरोरा</td>
<td>श्री सुजला</td>
<td>वीरू घोला अनजुला देवी</td>
</tr>
<tr>
<td>8</td>
<td>शाकर B.F.</td>
<td>बहरामपुर</td>
<td>16 km.</td>
<td>श्री शाकर गुप्ता</td>
<td>श्री सुजला</td>
<td>वीरू घोला अनजुला देवी</td>
</tr>
</tbody>
</table>
Inclusion of ~400,000 migratory and settled high risk areas in RI microplans

- ~254,000 Migrant sites identified
- ~164,000 HR areas in settled population

= 10 HR sites
Vaccination status of children from HRG sites of CGPP catchment area

- Percent eligible children vaccinated for OPV0
- Percent eligible children vaccinated for OPV3


48.3  53.3  47.6  49.8  45.7  56.5
34.0  31.5  27.2  40.5  34.4  53.0
Lessons Learnt

- HRG tracking strategy was very effective to reach out to most marginalized populations.
- Social and epidemiological data is instrumental in tracking target populations and micro planning.
- High-risk approach is essential for the allocation of resources and better programming.
- Tailored-made strategy helps in reaching to specific hard-to-reach or under-served communities.
- Informers from local community play an important role in reaching out to HRGs.
Recommendation

- HRG tracking strategy applied in polio program can be used to reach out to key populations for TB control or any other vector-borne disease control programs.

- This strategy is useful for strengthening health systems by bringing equity and improve coverage.
THANKS