TB screening in different child health entry points. Experiences from DR Congo

Annual meeting of the Child and Adolescent TB working group

Papy NDJIBU, MD - 29 November 2022
Outline

- Introduction
- Model of care
- Key results
- Lessons learned
Introduction
CaP TB case-finding interventions

Household Contact investigation
(Community-based or facility-based)

Facility-based Intensified Case Finding
(OPD/IPD/ MCH/Nutrition/HIV)
- Triage
- Waiting Room

TB diagnostics Investigations
- TB focal person or consulting clinicians

Diagnosis
Model of Care/Patient Flow
Systematic Pediatric TB Screening in Child Health entry points

Consultation → TB Unit

- Pediatric TB training
- Sample collection procedures (GA)
- Building confidence re decision on treatment initiation

Community volunteers escort patients if referral is needed
- Transport vouchers (for CHWs)
- CXR vouchers
- Xpert as first Diagnostic tool

Consultation: OPD → MCH → HIV → IPD → Nutrition
Xpert → CXR

• Community volunteers escort patients if referral is needed
• Transport vouchers (for CHWs)
• CXR vouchers
• Xpert as first Diagnostic tool
Intensified Case Finding (ICF)

Outil d’intensification de Recherche active – Cas TB Pédiatrique

Date: ___ / ___ / ___  Age: ___ an  Sexe: □ M □ F

L’ENFANT A-T-IL LES CARACTÉRISTIQUES SUIVANTES:

<table>
<thead>
<tr>
<th>SYMPTOMES</th>
<th>OUI</th>
<th>NON</th>
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</thead>
<tbody>
<tr>
<td>Toux?</td>
<td></td>
<td></td>
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<tr>
<td>Difficulté respiratoire?</td>
<td></td>
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<tr>
<td>Fièvre?</td>
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<tr>
<td>Sueurs Nocturnes?</td>
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<tr>
<td>Fatigue / Gaité réduite / léthargie?</td>
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<td>Perte de poids ou d’appétit ou retard de croissance?</td>
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<td>Gonflement des ganglions du cou?</td>
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Histoire (<12 mois) contact étroit avec un Tuberculeux?

Legende de code de couleur: Blanche = SM/PTME; Bleue = consultation externe; Rose = Nutrition; Jaune = Service Pédiatrique

A utiliser dans toutes les portes d’Entrée Intégrées

A utiliser par le clinicien uniquement

Evaluation clinique

- Toux >2 semaines?
- Respiration sifflante >2 semaines?
- Fièvre >10 jours?
- Sueurs Nocturnes >2 semaines?
- Autres signes de TB/TBEP?
- Ca Présumé TB référé pour investigations approfondies?

* Si oui, SVP remplir le formulaire Pédiatrique Cap-TB

MCH  pediatric IPD.  OPD Unit Pediatric Ward  Nutrition Unit
### Results: Number Needed to Screen by Entry Points

Number Needed to Screen to Identify One Pediatric TB Case (NNS) Feb 2019-June 2021

<table>
<thead>
<tr>
<th>Entry Point</th>
<th>0-14y screened (#)</th>
<th>0-14 y diagnosed with TB (#)</th>
<th>Needed to screen to identify one TB case (NNS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPD</td>
<td>68,496</td>
<td>2,282</td>
<td>30</td>
</tr>
<tr>
<td>IPD</td>
<td>5,739</td>
<td>145</td>
<td>40</td>
</tr>
<tr>
<td>Nutrition</td>
<td>823</td>
<td>108</td>
<td>8</td>
</tr>
<tr>
<td>MCH</td>
<td>123,835</td>
<td>7</td>
<td>17,690</td>
</tr>
<tr>
<td>HIV</td>
<td>1,489</td>
<td>43</td>
<td>35</td>
</tr>
</tbody>
</table>

- Whenever a child comes to a health center, they need to be screened in all entry points
- If resources are limited, entry points attending children who are sick have a better yield, either in absolute numbers (OPD) or lower NNS (nutrition)
- Children with HIV need systematically to be screened for TB

**NB:** In the DRC health system, MCH services provide immunization and regular growth check for children <5 years old
Trend TB detection in Children

Average monthly rate per site (Before – After CaP TB Intervention)

- Baseline: 3.4
- Intervention: 4.9
Lessons Learned (1)

- Integration of TB screening in all pediatric entry points contributed to improved pediatric TB case finding
  - On-site pediatric TB training, regular site mentorship and supervision to build frontline HCWs capacity to manage pediatric TB
  - Facility-level dashboards to improve accountability and performance, as well as engagement and motivation across all entry points
  - Dissemination of a tool allowing screening (ICF, rubber stamp)

- Access to diagnostic investigations
  - Optimization of Xpert network through establishment of hubs and spokes and support for sample transportation
  - Sample collection procedures, Xpert as initial test for pediatric presumptive TB patients
  - Support for patient referral to complete diagnostic investigations: critical role played by Community Health Care workers (CAD)
  - CXR vouchers
Lessons Learned (2)

- Collaboration and key partnership

- World Health Organization
- National TB Program
- Community-based organizations
- National HIV program
- National Nutrition program (PRONANUT)
- National program for control of acute respiratory tract infections

➢ Pediatric Tb Working Group
Thank You

- The CaP TB project is made possible thanks to Unitaid’s funding and support
- Unitaid accelerates access to innovative health products and lays the foundations for their scale-up by countries and partners.