Introduction

Uptake of TB child contact screening and TB preventive treatment (TPT) in high-burden low resource countries is limited by the necessity to bring children to the facility and its associated cost and burden. We evaluated the TPT initiation and completion in a community-based intervention compared to the facility-based standard of care (SOC) among household child contacts in Cameroon and Uganda.

Methods

- Pragmatic cluster randomised trial: 20 clusters (CaP-TB supported facilities and their catchment area)
- Endpoints
  - Primary: TPT completion among declared child contacts < 5 years and 5-14 years children living with HIV (CLHIV)
  - Secondary: TB screening and detection among all declared child contacts < 15 years
- Sample size for primary endpoint: 1500 declared household child contacts < 5 years or 5-14 years CLHIV

Results

Nov 2019 to Dec 2021: 562 and 342 index cases enrolled in the intervention and SOC arms, declaring 1,895 and 1,005 child contacts, respectively. 941 (49.7%) and 459 (45.7%) declared child contacts < 5 years or aged 5-14 years CLHIV in the intervention and SOC arms, respectively. 79.9% children initiated and completed TPT in the intervention compared to 61.0% in the SOC arm, adjusted OR=3.13 (95% CI 1.28, 7.80), p=0.009

Conclusion

Significant increase of child contacts who initiated and completed TPT and increase number of contacts screened and diagnosed with TB with the community intervention.

TPT management cascade among child contacts < 5 years and 5-14 years CLHIV

- Declared child contacts 941
  - Screened for TB 839 (89.2)
  - Eligible to TPT 807 (85.8)
  - Initiated on TPT 800 (85.0)
  - Completed TPT 751 (79.8)
- TB screening and diagnosis cascade among all child contacts

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Standard of Care</th>
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<tbody>
<tr>
<td>Declared child contacts</td>
<td>459</td>
</tr>
<tr>
<td>Screened for TB</td>
<td>372 (81.0)</td>
</tr>
<tr>
<td>Eligible to TPT</td>
<td>366 (79.7)</td>
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<tr>
<td>Initiated on TPT</td>
<td>282 (61.4)</td>
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Scaled-up, community-based interventions have the potential to improve TB detection and TPT coverage and outcomes among child contacts in resource-limited settings