An Evaluation of Provider-Initiated Testing and Counseling as a Scale-Up Strategy for Pediatric HIV Program Enrollment in Nigeria

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Background

• In 2012, an estimated 430,000 children were living with HIV in Nigeria, including 59,000 children newly infected with HIV, the highest in the world.
• Despite high HIV incidence and prevalence, the rate of diagnosis and enrolment of these children into care and treatment programs remains poor.
• Only 12% of the estimated number of Nigerian children requiring ART in 2012 were placed on treatment.
• Provider-Initiated Testing and Counseling (PITC) is a WHO-recommended strategy to expand access to HIV services among eligible populations.
• In generalized epidemics such as in Nigeria, WHO recommends offering opt-out HIV testing to all clients accessing services at health facilities.
• This study examined PITC implementation and functionality, and its performance in increasing enrolments in a large Pediatric HIV program in Nigeria.
Methods

• This was a retrospective survey.
• The study targeted all healthcare facilities trained on Pediatric PITC between 2011 and 2013 by the Institute of Human Virology Nigeria (IHVN), a public health NGO.
• Children targeted were 18 months -18 years accessing health care at the surveyed facilities.
• Patient PITC and enrollment-related data were collected from routine facility registers and reports.
• Facility PITC functionality was assessed via self-evaluation by facility’s Pediatric ART focal person or key site staff, using a structured questionnaire.
Methods

• A 4-item scale used to rate functionality of implemented PITC programs:
  – Active: offering PITC to > 50% of clients
  – Intermittently active: offering PITC to 25-50% of clients
  – Poorly functional: offering PITC to <25% of clients
  – Defunct: not offering PITC, or program barely functioning.

• Data was evaluated for impact of PITC on Pediatric HIV program enrollment

• Results were summarized using descriptive statistics.
Results: Implementation

- Twenty-one (21) facilities representing 13 of 37 Nigerian states had been trained on PITC.
- These 21 facilities accounted for ~70% of IHVN’s 6,000+ Pediatric HIV enrollments.
- Four (19%) were secondary-level and 17 (81%) tertiary-level healthcare facilities.
- Eighteen of 21 facilities (86%) had implemented PITC while 3 (14%, all secondary-level centers) had not.
- Overall, client acceptance rate for PITC was 99.4% and 8.4% of tests were positive.
## Results: PITC Implementation and Operations

<table>
<thead>
<tr>
<th>Data Evaluated</th>
<th>Results (% or % of responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sites with Established PITC program</strong></td>
<td></td>
</tr>
<tr>
<td>Established</td>
<td>18/21 (86%)</td>
</tr>
<tr>
<td>Not established</td>
<td>3/21 (14%)</td>
</tr>
<tr>
<td><strong>Most common reasons for not establishing PITC</strong></td>
<td></td>
</tr>
<tr>
<td>Lack of rapid HIV test kits</td>
<td>25%</td>
</tr>
<tr>
<td>Poor commitment from facility leadership</td>
<td>25%</td>
</tr>
<tr>
<td>No funding</td>
<td>25%</td>
</tr>
<tr>
<td>Poor commitment of Pediatric staff</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Most common reasons for inadequate implementation of PITC</strong></td>
<td></td>
</tr>
<tr>
<td>Lack of rapid test kits(RTKs)</td>
<td>27%</td>
</tr>
<tr>
<td>No/limited funding</td>
<td>20%</td>
</tr>
<tr>
<td>Poor commitment from facility leadership</td>
<td>14%</td>
</tr>
<tr>
<td><strong>Most common units where PITC offered</strong></td>
<td></td>
</tr>
<tr>
<td>General Pediatric Out-Patient Department</td>
<td>23%</td>
</tr>
<tr>
<td>Pediatric HIV clinic</td>
<td>19%</td>
</tr>
<tr>
<td>Pediatric Ward</td>
<td>18%</td>
</tr>
<tr>
<td>Emergency Pediatric Unit</td>
<td>17%</td>
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<tr>
<td><strong>Staff performing PITC</strong></td>
<td></td>
</tr>
<tr>
<td>Lab technicians</td>
<td>27%</td>
</tr>
<tr>
<td>Nurses</td>
<td>23%</td>
</tr>
<tr>
<td>Registrars (Resident Physicians)</td>
<td>20%</td>
</tr>
<tr>
<td>Consultant physicians</td>
<td>12%</td>
</tr>
<tr>
<td>Medical Officers (General Physicians)</td>
<td>12%</td>
</tr>
</tbody>
</table>
Results: PITC functionality at facilities (N=18)

- Active: 33%
- Intermittently Active: 17%
- Poorly Functional: 28%
- Defunct: 22%

- Offering PITC to > 50% of clients
- Offering PITC to 25-50% of clients
- Offering PITC to <25% of clients
- Not offering PITC
Results: Enrolment

• For facilities that implemented PITC (18/21): There was an overall 37.8% increase in new enrollments in care, and 86% increase in new enrollments on ART in the 12 months after, compared to the 12 months preceding PITC training and implementation.

• For facilities that had not implemented PITC (3/21), there was no statistically evaluable change in new enrollments in care or on ART in the 12 months after, compared to the 12 months preceding PITC training. (Before and after numbers were too low to evaluate).
Conclusions

• PITC is feasible at health facilities in Nigeria
• PITC is highly acceptable to children, and their parents and guardians.
• PITC is effective in increasing identification and enrollment of HIV+ children into care and treatment
  – Case detection rate was 8.4%, more than twice the 2012 national prevalence of 3.1%
• The commonest reasons for non-implementation and poor implementation of PITC were identical
  – Lack of rapid test kits
  – Poor commitment from facility leadership
  – Lack of funds.
Recommendations

• Advocacy to, and involvement of facility leadership has to occur before PITC is implemented at any health facility.

• A consistent supply of rapid HIV test kits should be ensured, for the successful implementation and sustainability of PITC.

• Particular focus and support should be targeted to lower-level (non-tertiary) facilities implementing PITC to ensure long-term success.

• If access to pediatric HIV care and treatment is to be effectively scaled-up, PITC should be strengthened—with leadership, financial and commodity support—at all levels of the healthcare system in Nigeria.