DELAYS IN INITIATION OF ANTIRETROVIRAL THERAPY AMONG HIV-INFECTED CHILDREN IN RURAL ZAMBIA

9th Interest Conference
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Background

Care and treatment are available to many HIV-infected children in sub-Saharan Africa. Initiating and adhering to ART is a life-long process requiring significant emotional, physical and financial resources from the family. Barriers remain that delay the or inhibit ART initiation. Minimizing these barriers is critical to efforts to begin ART early.
The aim of the study was to describe reasons for delaying ART initiation among HIV-infected children receiving ART in rural Zambia
Study Setting

The study was nested within an ongoing cohort study (PART Study) at Macha Hospital, Choma District, Southern Province of Zambia

PART Study:
All HIV-infected children (<16 years of age) enrolled in the HIV clinic are eligible to participate in the study. Children are seen every 3 months for clinic and study visits.

ART was initiated at the discretion of the clinical staff (doctors, clinical officers and nurses).

During the study all children <2 years were eligible for ART and children ≥2 years were eligible by immunologic and clinical criteria.
Methods

All children initiating ART in the study from 2011 to 2013 were eligible for inclusion in this analysis.

Information on ART eligibility was abstracted from patients’ medical records (as indicated by clinic staff):

- Date of eligibility
- Criteria for eligibility
- Reasons for delay in initiation

Reasons for delay were classified as:

- Family related – family unpreparedness, adherence issues, child absent
- Clinic logistics – need for treatment preparation, awaiting test results
- Health related – TB treatment, clinical instability
- Other – pharmacy error, no reason provided
Results

200 children initiated ART and had eligibility information

<table>
<thead>
<tr>
<th>Characteristics at ART eligibility</th>
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<tbody>
<tr>
<td>Male sex</td>
<td>49%</td>
</tr>
<tr>
<td>Age (years): Median (IQR)</td>
<td>2.9 (1.4, 6.9)</td>
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<tr>
<td>CD4%: Median (IQR)</td>
<td>18.0 (12.5, 22.9)</td>
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<th>Characteristics at ART initiation</th>
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<tbody>
<tr>
<td>Age (years): Median (IQR)</td>
<td>3.1 (1.4, 7.0)</td>
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<tr>
<td>CD4%: Median (IQR)</td>
<td>17.0 (12.1, 23.0)</td>
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<tr>
<td>Hemoglobin (g/dL): Median (IQR)</td>
<td>9.7 (8.6, 10.5)</td>
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<tr>
<td>WHO stage 3/4</td>
<td>67%</td>
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<tr>
<td>WAZ: Median (IQR)</td>
<td>-2.0 (-2.9, -0.9)</td>
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</table>
Results

60% delayed initiating ART for a median of 28 days (IQR: 14, 75)

Overall <2 years 2-5 years >5 years

<table>
<thead>
<tr>
<th>Adherence issues</th>
<th>Family unpreparedness</th>
<th>Child left at home</th>
<th>Awaiting blood results</th>
<th>Abnormal blood results</th>
<th>Eligible at enrollment</th>
<th>Needs treatment preparation</th>
<th>Patient unstable</th>
<th>TB treatment</th>
<th>Pharmacy error/stockout</th>
<th>No reason given</th>
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<tr>
<td>26</td>
<td>15</td>
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Family-related Clinical logistics Clinical instability Other
Results

Number of reasons for delay
- One: 64%
- Two: 27%
- Three: 7%
- Four: 2%

Type of delay
- Family-related: 35%
- Clinic logistics: 32%
- Health-related: 27%
- Other: 6%
Results

Cumulative probability of ART initiation after eligibility among HIV-infected children with delayed ART initiation, by type of delay

Significantly longer time to ART initiation
Conclusions

Reasons for delaying ART were distributed across family issues, clinic logistics and co-morbidities, with no single or category of causes predominant.

Strategies to reduce delays in ART initiation will need to address a diverse set of issues so children can benefit from early treatment.
Acknowledgments

Study investigators

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Study participants & caregivers

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