Evolving Challenges in Treatment, Laboratory, Care and Support Services

2009 HIV/AIDS Implementers Meeting
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Rapporteur Session
Rapporteur Team

Marco Vitoria, MD, WHO

- Kate Anteyi (CDC Nigeria)
- Helen Chun (DOD)
- Bill Coggin (OGAC)
- John Eyres (USAID Vietnam)
- Christian Gunneberg (WHO)
- Brad Hersh (WHO)
- Charles Holmes (OGAC)
- Nancy Knight (CDC Nigeria)
- Heidi Mihm (USAID)
- Linda Parsons (CDC)
- Pratima Raghunathon (CDC Rwanda)
- Souleymane Sawadago (CDC Namibia)
Some numbers…

- 14 sessions (6, 7, 13, 16, 20, 23, 30, 37, 41, 47, 54, 55, 57 and 59)
- 64 oral presentations
- 24 posters
Major Topics

- Costing of ART scale up
- ART monitoring strategies
- QA for laboratory services
- Adherence monitoring
- Access to treatment & early mortality
- ART and treatment retention
- HIVDR & Pharmacovigilance
- TB/HIV (3Is, collaborative activities & clinical management)
- OI & Cancer diagnosis and management
- Linking ART services to community & other services
How will the economic crisis affect HIV treatment programmes?
Country Options on Costs of Treatment Scale up: More Funds, Lower Prices or More Efficiency?

- The current trend is to start ART earlier, use less toxic drugs and promote more lab monitoring.
- ART scale up will cost more irrespective of the regimens or criteria adopted.
- Under a constrained budget, increasingly important that national programs, funders and other stakeholders have a sound understanding of the costs, social policy choices and tradeoffs inherent in their decisions.
- We have to look at opportunity costs and balance continued treatment scale up with investments in prevention and systems strengthening.

Session 7 (Abstracts 61, 233, 888, 2006, 6033, 6101)
Can CD4 cell count predict virologic failure?

Virological Profile in Immunological Failure Cases

- Concordant Group: 53 (69.7%)
- Intermediate Group: 7 (9.2%)
- Discordant Group: 16 (21.1%)

Time to Failure with both Virologic and immunologic Failure (n=1331)

- VL failure prior to CD4 failure n=441
- CD4 failure prior to VL failure n=216
- CD4 and VL failure at same time n=674

ANUSUYA et al (Abs 1275)

Kanki (Abs 6039)
Is Viral Load Testing Cost Effective Strategy in ART Failure?

Cost-Benefit Analysis

<table>
<thead>
<tr>
<th>Criteria for treatment Failure</th>
<th>Incremental Cost of testing</th>
<th>Total Cost</th>
<th>Incremental Cost of drugs</th>
<th>Total Savings (1 yr)</th>
<th>Net Benefit (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VL detectable</td>
<td>-</td>
<td>15,450</td>
<td>-</td>
<td>288,194</td>
<td>272,744</td>
</tr>
<tr>
<td>-repeat VL testing in 6 months, 206 pts, 10% detectable</td>
<td>6,180</td>
<td>21,630</td>
<td>14,690</td>
<td>273,504</td>
<td>251,874</td>
</tr>
</tbody>
</table>

Formula for calculating cost-effectiveness of VL testing for suspected treatment failure to 1st-line ARV

\[
\text{Cost of VL Test} \leq \text{Expected cost savings of each VL test in preventing unnecessary 2nd-line ARV use}
\]

\[
\text{Cost of VL Test} \leq (1-\text{PPV})(\text{ARV2} - \text{ARV1})
\]

\[
\text{PPV} = \text{Positive Predictive Value of Clinical and Immunological Criteria for Treatment Failure to 1st line ARV}
\]

\[
\text{ARV2} = \text{Cost of 2nd line ARV drugs for 1 year}
\]

\[
\text{ARV1} = \text{Cost of 1st line ARV drugs for 1 year}
\]

Colby (Abs. 1624)
More than just CD4 and VL …
High False-Positive Rates on EQA3-A5 When Testing with Determine HIV-1/2

<table>
<thead>
<tr>
<th>EQA</th>
<th>Spec.</th>
<th>Expected Result</th>
<th>N</th>
<th>NPos (%)</th>
<th>NInv (%)</th>
<th>NNeg (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A2</td>
<td>NEG</td>
<td>40</td>
<td>2.50</td>
<td>2.50</td>
<td>95.00</td>
</tr>
<tr>
<td>1</td>
<td>A5</td>
<td>NEG</td>
<td>42</td>
<td>2.38</td>
<td>0.00</td>
<td>97.62</td>
</tr>
<tr>
<td>2</td>
<td>A1</td>
<td>NEG</td>
<td>65</td>
<td>6.15</td>
<td>0.00</td>
<td>93.85</td>
</tr>
<tr>
<td>2</td>
<td>A4</td>
<td>NEG</td>
<td>67</td>
<td>1.49</td>
<td>0.00</td>
<td>98.51</td>
</tr>
<tr>
<td>2</td>
<td>A6</td>
<td>NEG</td>
<td>66</td>
<td>6.06</td>
<td>0.00</td>
<td>93.94</td>
</tr>
<tr>
<td>3</td>
<td>A1</td>
<td>NEG</td>
<td>98</td>
<td>3.06</td>
<td>0.00</td>
<td>96.94</td>
</tr>
<tr>
<td>3</td>
<td>A2</td>
<td>NEG</td>
<td>98</td>
<td>5.10</td>
<td>0.00</td>
<td>94.90</td>
</tr>
<tr>
<td>3</td>
<td>A5</td>
<td>NEG</td>
<td>97</td>
<td>24.74</td>
<td>0.00</td>
<td>75.26</td>
</tr>
</tbody>
</table>

Jani et al (Abs 602)
Monitoring ART Adherence: Multiple methodologies and potential new thresholds

Pharmacy Refill Adherence Associated with HIV Suppression in Resource Limited Settings

Haberer (Abs 6005) & Stirratt (Abs 6006)
Role of CD4 on Promoting Early Access to Treatment

<table>
<thead>
<tr>
<th>WHO Stage</th>
<th># of patients</th>
<th># Eligible for ART based on CD4 + WHO</th>
<th>Percent eligible for ART</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>69</td>
<td>25</td>
<td>36%</td>
</tr>
<tr>
<td>II</td>
<td>56</td>
<td>27</td>
<td>48%</td>
</tr>
<tr>
<td>III</td>
<td>50</td>
<td>36</td>
<td>72%</td>
</tr>
<tr>
<td>IV</td>
<td>25</td>
<td>25</td>
<td>100%</td>
</tr>
<tr>
<td>No Stage</td>
<td>17</td>
<td>11</td>
<td>65%</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>124</td>
<td>57%</td>
</tr>
</tbody>
</table>

Mubiru et al (Abs 1208)

Memiah (Abs 1318)
Impact of Early and Intensive Follow up on Mortality and Retention

Factors Associated with Retention at 6 and 12 Months after ART Initiation

<table>
<thead>
<tr>
<th>Baseline clinical</th>
<th>6 Months AOR (95% CI)</th>
<th>12 Months AOR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline CD4 ≥ 200 cells/µl</td>
<td>1.69 (1.33-2.14)</td>
<td>1.13 (0.79-1.60)</td>
</tr>
<tr>
<td>Baseline BMI ≥ 18.5</td>
<td>2.79 (1.93-4.04)</td>
<td>1.71 (1.05-2.78)</td>
</tr>
<tr>
<td>Baseline Hb ≥ 8 g/dL</td>
<td>2.26 (1.90-2.68)</td>
<td>1.99 (1.56-2.56)</td>
</tr>
<tr>
<td>Prescribed CTX at baseline</td>
<td>1.89 (1.25-2.85)</td>
<td>1.70 (1.19-2.43)</td>
</tr>
</tbody>
</table>

Mbofana et al (Abs 1608)
HIV Early Warning Indicators: an Accessible Tool to Assess Drug Resistance

Vitoria (Abs 6037) Ekra et al (Abs 1115) & Pereko et al (Abs 1997)
Creating a culture of “drug safety” using Pharmacovigilance

**Pharmacovigilance:** science and activities related to detection, assessment, understanding and prevention of adverse effects to decrease morbidity and mortality
TB/HIV: Success and Challenges

- Scale up for HIV testing for TB patients is remarkable but ART uptake is lagging
- TB is the major cause of death in PLWH in RLS and a more aggressive approach is needed…
- TB screening is progressing but IPT & TB Infection control not yet…

Sessions 6, 20 and 54
Clinical signs of confirmed Cryptococcal Meningitis cases (n=122)

- Still Neck: 61.5%
- Temp >38: 54.1%
- Wasted: 54.1%
- Restless: 30.3%
- Coma: 23.8%

Prevalence of HPV types by CD4 count levels

- HPV 16 (p<0.01)
- HPV 18 (p=0.15)
- HPV 33 (p=0.9)
- HPV 56 (p=0.9)
- HPV 59 (p=0.5)
- HPV 66 (p=0.04)
- Any HPV (p<0.01)
- Oncogenic (p<0.01)
- Multiple oncogenic (p<0.01)
Improving Quality of Care through PLWH and Community Involvement

Community and Home Based Care Workers

- Counseling
  - Side effects and ART adherence
  - Couple counseling

- Referral
  - Accompanied referrals
  - Nutrition, Co Infections

- Prevention
  - Condom promotion

Aggarwal et al (Abs 879)

Mpangile et al (Abs 895)
Final Messages

• Treatment:
"Be realistic and aligned to your context but continue to push for inspirational targets“

• Laboratory:
"Strengthen lab services, but don't permit absence of lab tests to be a barrier to access treatment and care“

• Care:
"Try to be simple, not simplistic“

• Support:
"Promote efficient access to care and treatment with and for PLWH, and prioritize people most in need"
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- The team of rapporteurs
- The clients of HIV programs, worldwide—you give us reason to continue!
Thank You / Tangi