The importance of addressing HPV among women living with HIV in Latin America and the Caribbean

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Towards Elimination of Cervical Cancer in the Americas
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Outline

• Epidemiological situation of HIV and of HPV/CxCa among women living with HIV
• Synergies among HPV-HIV
• Lessons learned with the HIV response and opportunities for integration
• Regional next steps
Summary of the global HIV epidemic (2018)

- **37.9 million** people living with HIV [32.7 million – 44.0 million]
- **1.7 million** people newly infected [1.4 million – 2.3 million]
- **0.8 million** HIV-related deaths [0.6 million – 1.1 million]

Source: UNAIDS/WHO estimates
HIV epidemic in the Americas, 2018

WHO Region of the Americas

3.5 million
People living with HIV

- 1% New diagnoses annually relative to 2010

- 23% Deaths annually relative to 2010

Source: UNAIDS/WHO estimates
Trend in adults living with HIV in Latin America and the Caribbean, by sex

Est. 740,000 WLHIV (15+) in LAC in 2018

Est. 62% of WLHIV (15+) were receiving ART in LAC in 2018

Source: UNAIDS Estimates 2019
Cervical cancer screening among women living with HIV aged 30-49, last year available (Pap, VIA, HPV)

• 34 countries in the Americas report to the Global AIDS Monitoring (GAM) platform, six reported on this indicator:

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Indicator value (%)</th>
<th>Numerator</th>
<th>Denominator (est. % screened)</th>
<th>Estimated # WLHIV (15+), same year</th>
<th>Source (MOH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grenada</td>
<td>2017</td>
<td>53.1</td>
<td>17</td>
<td>32 (&gt;16%)</td>
<td>&lt;200</td>
<td>Clinical and pathology records 2014 cohort of WLHIV newly infected; Pap</td>
</tr>
<tr>
<td>Argentina</td>
<td>2015</td>
<td>43.6</td>
<td>78</td>
<td>179 (0.4%)</td>
<td>42,000</td>
<td>10/52 Servicios de Atención Integral; Pap</td>
</tr>
<tr>
<td>Honduras</td>
<td>2018</td>
<td>13.5</td>
<td>225</td>
<td>1,671 (19%)</td>
<td>8,900</td>
<td>9/19 Unidades de Atención Integral</td>
</tr>
<tr>
<td>Guatemala</td>
<td>2018</td>
<td>11.1</td>
<td>1,265</td>
<td>11,394 (100%)</td>
<td>--</td>
<td>Castries STI and Vieux-Fort STI data</td>
</tr>
<tr>
<td>St. Lucia</td>
<td>2017</td>
<td>5.8</td>
<td>19</td>
<td>326 (&gt;65%)</td>
<td>&lt;500</td>
<td>Users of Ladymead Reference Unit</td>
</tr>
<tr>
<td>Barbados</td>
<td>2018</td>
<td>1.9</td>
<td>17</td>
<td>899 (90%)</td>
<td>1,000</td>
<td></td>
</tr>
</tbody>
</table>

Source: UNAIDS, Global Aids Monitoring
HPV in women living with HIV in LAC

- **High prevalence** of HPV infection in WLHIV (median: 68%)
- Higher prevalence of oncogenic types, especially HPV-16
- > 3-fold increased risk of SIL

**Factors associated with HPV infection in WLHIV**
- Age under 35
- Lower schooling level
- Alcohol use (light or heavy drinking)
- > 3 sexual partners

**Factors associated with abnormal cytology/CIN**
- No use of ARV
- Early sexual debut (<19)
- Low CD4 cell count (ex. <200 cells/mm³)
- High HIV viral load

<table>
<thead>
<tr>
<th>Reference</th>
<th>Country</th>
<th>Year</th>
<th>n</th>
<th>HPV prevalence (WLHIV)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Queiroz</td>
<td>Brazil</td>
<td>1999-2000</td>
<td>20</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Levi</td>
<td>Brazil</td>
<td>2007</td>
<td>208</td>
<td>98.0%</td>
<td></td>
</tr>
<tr>
<td>Jalil</td>
<td>Brazil</td>
<td>2007</td>
<td>44</td>
<td>79.5%</td>
<td>pregnant</td>
</tr>
<tr>
<td>Correa</td>
<td>Brazil</td>
<td>2003-2008</td>
<td>288</td>
<td>78.8%</td>
<td></td>
</tr>
<tr>
<td>Dames</td>
<td>Bahamas</td>
<td>2008</td>
<td>167</td>
<td>78.0%</td>
<td></td>
</tr>
<tr>
<td>Entiauspe</td>
<td>Brazil</td>
<td>2006-2007</td>
<td>38</td>
<td>76.4%</td>
<td></td>
</tr>
<tr>
<td>Munoz</td>
<td>Colombia</td>
<td>2003-2008</td>
<td>245</td>
<td>70.6%</td>
<td></td>
</tr>
<tr>
<td>Nicol</td>
<td>Brazil</td>
<td>2001-2008</td>
<td>532</td>
<td>69.4% (only 16, 18, 6, 11)</td>
<td></td>
</tr>
<tr>
<td>Camargo</td>
<td>Colombia</td>
<td>2007-2012</td>
<td>216</td>
<td>69.0%</td>
<td></td>
</tr>
<tr>
<td>Araújo</td>
<td>Brazil</td>
<td>1997-2009</td>
<td>348</td>
<td>68.0%</td>
<td></td>
</tr>
<tr>
<td>Dames</td>
<td>Bahamas</td>
<td>2007-2012</td>
<td>100</td>
<td>67.0%</td>
<td></td>
</tr>
<tr>
<td>Firnhaber</td>
<td>Brazil</td>
<td>2006-2007</td>
<td>160</td>
<td>65.6% (only 16, 18, 6, 12)</td>
<td></td>
</tr>
<tr>
<td>Brandão</td>
<td>Brazil</td>
<td>2006-2008</td>
<td>51</td>
<td>62.7%</td>
<td>pregnant</td>
</tr>
<tr>
<td>Melgaço</td>
<td>Brazil</td>
<td>2007-2008</td>
<td>140</td>
<td>60.0%</td>
<td></td>
</tr>
<tr>
<td>Brandão</td>
<td>Brazil</td>
<td>2006-2008</td>
<td>51</td>
<td>52.9%</td>
<td></td>
</tr>
<tr>
<td>Luz</td>
<td>Brazil</td>
<td>2006-2008</td>
<td>703</td>
<td>48.9%</td>
<td></td>
</tr>
<tr>
<td>Grinzstejn</td>
<td>Brazil</td>
<td>1996-2006</td>
<td>634</td>
<td>48.0%</td>
<td></td>
</tr>
<tr>
<td>Silva Martins</td>
<td>Brazil</td>
<td>2007-2011</td>
<td>450</td>
<td>47.5%</td>
<td></td>
</tr>
<tr>
<td>Rocha Brisschiliari</td>
<td>Brazil</td>
<td>2011</td>
<td>178</td>
<td>46.6%</td>
<td></td>
</tr>
<tr>
<td>Cerqueira</td>
<td>Brazil</td>
<td>2011</td>
<td>122</td>
<td>42.7%</td>
<td></td>
</tr>
</tbody>
</table>

Source: PAHO literature review 2015 (by G. Ravasi), unpublished
Synergistic effects of HPV, Cervical Cancer Carcinogenesis and HIV infection

- Increases HPV acquisition
- Decreases clearance
- Accelerates progression
- Decreases regression
- Increases recurrence

ART reduces progression and increases regression of SIL-CIN

Synergistic interventions to control HPV, Cervical Cancer Carcinogenesis and HIV infection

- ART reduces HPV incidence and prevalence
- HPV vaccine impacts on HIV acquisition
- HPV treatment impacts on HIV acquisition
Global and Regional Commitments towards ending AIDS and STI as a public health problem by 2030 that supports CxCa Elimination
Lessons learned with the HIV response

- **Adaptability** to a fast changing environment
- Effective prevention efforts require a combination approach of biomedical, behavioral and structural interventions
  - Early diagnosis and immediate treatment
  - Differentiated models of care
  - Community and peer-led screening and treatment
  - Active linkage to care
  - POC diagnostics with simplified algorithms
  - Use of communication technologies (ex. SMS)
- Competition in generics drug markets
- **Meaningful engagement** of civil society from the start
- Strong community mobilization
Opportunities for Integration

• Established HIV prevention and care services
  • effective strategies for linkage to care
  • access to highly vulnerable populations: WLHIV, female sex workers, transgender men, women who uses drugs, etc.
• SRH, STI and Adolescents’ services
• EMTCT Plus initiative: use of MCH platform for screening
• Lab multiplex platforms and specimen referral
Regional next steps

• Support the roll out and the monitoring of the Global STI Strategy & the Regional Plan of Action
• Complete regional mapping of policies and update epidemiological situation
• Support interprogrammatic work and service integration at country level
• Support countries to address data gaps
• Continue working in partnership with civil society organizations
Acknowledgements

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