Dynamics of HIV epidemic in Sub-Saharan Africa: Who are we leaving behind in treatment?

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Background

- Sub-Saharan Africa carries the heaviest burden of people living with HIV globally.
- Access to life prolonging antiretroviral treatment varies considerably between countries and within country.
- Estimated proportion of those knowing their HIV and accessing treatment ranges from 87% in Zimbabwe to 91% in Tanzania.
- Generally, women are more likely to access treatment compared to males.
- An exception in few countries such as Zambia and eSwatini where males are 11.1% and 17.2% more likely to access treatment than females respectively.
<table>
<thead>
<tr>
<th>Age</th>
<th>Zimbabwe</th>
<th>eSwatini</th>
<th>Zambia</th>
<th>Tanzania</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st</td>
<td>2nd</td>
<td>3rd</td>
<td>1st</td>
</tr>
<tr>
<td>15-24</td>
<td>50.1</td>
<td>83.7</td>
<td>85.4</td>
<td>66.1</td>
</tr>
<tr>
<td>25-34</td>
<td>66.0</td>
<td>79.8</td>
<td>82.5</td>
<td>82.4</td>
</tr>
<tr>
<td>35-49</td>
<td>79.9</td>
<td>87.4</td>
<td>85.8</td>
<td>89.5</td>
</tr>
</tbody>
</table>

- The older you get the more likely you are to know HIV positive status
- Similar pattern in all these countries
- Youth in Zambia and Tanzania least likely to know their HIV positive status
- The older you get the more likely you are to be diagnosed and put on treatment
- Similar pattern exists with viral suppression
To date, the HSRC and its partners have undertaken five population-based HIV and behavioural surveys, in previous surveys were conducted in 2002, 2005, 2008 & 2012. These surveys have provided an important gauge of the HIV epidemic of South Africa.

HIV Surveillance
HIV surveillance has been key in monitoring the response to the HIV epidemic, ART exposure, incidence testing and Viral Load testing.

HIVDR
HIV Drug Resistance
HIV drug resistance (HIVDR) testing was included in the 2017 survey for the first time in the survey series.
RESPONSE RATE
SOUTH AFRICA 2017

Valid Households
11,776

HIV Testing Response
61.1%

Household level response
82.2%

Blood Samples
23,923

Eligible individuals
39,132

Individual level response
93.6%
### HIV Prevalence, 2017

<table>
<thead>
<tr>
<th>Age</th>
<th>HIV prevalence (%)</th>
<th>Total PLHIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;2</td>
<td>2.8</td>
<td>62,000</td>
</tr>
<tr>
<td>2-14</td>
<td>2.7</td>
<td>390,000</td>
</tr>
<tr>
<td>15-24</td>
<td>7.9</td>
<td>756,000</td>
</tr>
<tr>
<td>25-49</td>
<td>26.4</td>
<td>5,588,000</td>
</tr>
<tr>
<td>50+</td>
<td>12.5</td>
<td>1,124,000</td>
</tr>
<tr>
<td>Total</td>
<td>14.0</td>
<td>7,920,000</td>
</tr>
</tbody>
</table>

- Numbers of people living with HIV continue to increase in South Africa
  - 2012: HIV prevalence was **12.2%** translating to 6.4 million people living with HIV.
- Continued HIV incidence and people living longer due to expanded access to antiretroviral contribute to this increase.
- Some indications of an ageing epidemic, amongst older people.
Highlights of HIV Incidence 2012 to 2017

- Incidence at 0.48% (=> 231,000 new infections annually)
- Higher incidence among females (0.51% => 122,000) compared to males (0.46% 109,000)
- Youth Incidence was 1.0% (=> 88,000)
- Youth: three times higher among females (1.51% => 66,000) compared to males (0.49% => 22,000)
- Over a third (38.0%) of all new infections come from this age group
- From 2012 to 2017 HIV incidence among youth declined by 17%
- The decline in incidence was only among females (26%) whilst among males incidence increased by 11%
## Exposure to ARVs, 2017

<table>
<thead>
<tr>
<th>Age</th>
<th>HIV+</th>
<th>ART</th>
<th>ART%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;2</td>
<td>62 000</td>
<td>23 003</td>
<td>76.5</td>
</tr>
<tr>
<td>2-14</td>
<td>390 000</td>
<td>117 000</td>
<td>48.0</td>
</tr>
<tr>
<td>15-24</td>
<td>756 000</td>
<td>227 4000</td>
<td>39.1</td>
</tr>
<tr>
<td>25-49</td>
<td>5 588 000</td>
<td>3 244 000</td>
<td>63.1</td>
</tr>
<tr>
<td>50+</td>
<td>1 124 000</td>
<td>753 000</td>
<td>76.7</td>
</tr>
<tr>
<td>Total</td>
<td>7 920 000</td>
<td>4 402 000</td>
<td>62.3</td>
</tr>
</tbody>
</table>

- A considerable proportion of <2 years on treatment.
- Youth is considerably lagging behind in access to treatment irrespective of gender.
- In all provinces that have infants living with HIV, a considerably high proportion of these infants is on treatment.
### Population Viral Load Suppression, 2017

- High exposure to ARVs consistently translated to high viral suppression for both males and females.
- 15 to 24 year olds show low levels of viral suppression.

<table>
<thead>
<tr>
<th>Age</th>
<th>Total</th>
<th>ART Exposure (%)</th>
<th>Viral Suppression (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Total %</td>
<td>Males</td>
</tr>
<tr>
<td>&lt;2</td>
<td>13 900</td>
<td>76.5</td>
<td>48.0</td>
</tr>
<tr>
<td>2-14</td>
<td>117 000</td>
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<td>62.3</td>
<td>56.3</td>
</tr>
</tbody>
</table>

- Viral load suppression threshold of <1 000 copies of HIV per ml in DBS samples.
• Much less than the national average of youth that are HIV positive know their status
Human Beings NOT just numbers

- These are not numbers but human beings

- **7 919 574** human beings in South Africa are living with HIV

- **4 402 000** are on ARVs

- **2 669 000** are not on life saving ARVs

- Most of those (60.1%) that are HIV positive (thus needing ARVs) and not on ARVs are youth aged 15 to 24, compare this to only 23.3% among 50+

- 77.5% of youth not on ARVs is virally unsuppressed

- Sadly, if they are not put on treatment immediately their chances of dying due to AIDS increases everyday that we don’t put them on treatment
Some Concluding Remarks

- We have left our youth behind and are failing them, only 39% on treatment
- We need to do a lot more, consistently, than what we have done so far, if we are to end the scourge of HIV epidemic
- Putting people on treatment is saving lives demonstrating progressive success with a challenge still persistent among youth.
- Prevention of new infections especially among those younger than 35 years and youth in particular is a serious challenge that we face
- We need to invigorate, strengthen and sustain HIV prevention programs to stop continuing transmission of HIV
- More detailed analyses of the Youth in South Africa will be presented on Tuesday, 12h45 to 13h45 Lunchtime Satellite Youth At Risk @ SYON 1
Funders

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