Status of HIV in Kenya

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My intention – key questions

• what is the prevalence and how many people are living with HIV AIDS?
• which regions are most affected
• which age group is most affected
• How did the last 100,000 new HIV infections occur
• what do we need to do different?
Sources of data

• Kenya demographic health survey
• ANC surveillance
• Incidence modeling
• Kenya Aids indicator survey
Methods (i)

• Stratified two-stage cluster sample design
  - 8 provinces, urban and rural areas

• Eligibility:
  - HH sample: HH residents/visitors present night before survey
  - Individual sample: Men and women age 15-64 from participating households

• Reported estimates weighted to account for sampling
Data Collection Tools in KAIS 2007

- Household questionnaire
- Individual questionnaire
- Venous blood draw
  - HIV, CD4, HSV-2, syphilis
  - Finger-prick/dried blood spot sample as alternative
  - Serial testing algorithms
  - Quality control on all reactive specimens and 5% of nonreactive specimens
HIV trends in Kenya

Year | HIV Prevalence (%)
---|---
1990 | 1.5%
1991 | 2.6%
1992 | 2.8%
1993 | 3.7%
1994 | 4.9%
1995 | 5.9%
1996 | 6.9%
1997 | 7.3%
1998 | 6.2%
1999 | 6.9%
2000 | 8.7%
2001 | 10.7%
2002 | 7.2%
2003 | 8.3%
2004 | 9.0%
2005 | 7.0%
2006 | 6.8%

Legend:
- Red: Total (Actual HIV Prevalence of Pregnant Women)
- Dark Red: Total (Adjusted HIV Prevalence of Adult Population)
HIV Prevalence by Gender (age 15-64)

7.1% (1.3 million) Kenyans age 15-64 were infected with HIV.

<table>
<thead>
<tr>
<th>% HIV Infected</th>
<th>TOTAL</th>
<th>FEMALES</th>
<th>MALES</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1</td>
<td>8.4</td>
<td>5.4</td>
<td></td>
</tr>
</tbody>
</table>
HIV Prevalence by Age & Gender

Female to male ratio decreases with age.
HIV Prevalence by Province

Great variation by geography ranging from 1% to 15% across provinces

Kenya 7.1%

Eastern 4.6%
North Eastern 0.8%
Rift Valley 6.3%
Western 5.4%
Nyanza 14.9%
Nairobi 8.8%
Coast 8.1%
Central 3.6%
HIV Prevalence by Residence & Gender
2003 KDHS and 2007 KAIS

Age 15-49

Urban

Rural

<table>
<thead>
<tr>
<th></th>
<th>2003 KDHS</th>
<th>2007 KAIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Female</td>
<td>12.3</td>
<td>10.4</td>
</tr>
<tr>
<td>Urban Male</td>
<td>7.5</td>
<td>6.3</td>
</tr>
<tr>
<td>Urban Total</td>
<td>10.0</td>
<td>8.7</td>
</tr>
<tr>
<td>Rural Female</td>
<td>7.5</td>
<td>8.3</td>
</tr>
<tr>
<td>Rural Male</td>
<td>3.6</td>
<td>5.3</td>
</tr>
<tr>
<td>Rural Total</td>
<td>5.6</td>
<td>7.0</td>
</tr>
</tbody>
</table>
HIV Prevalence by Male Circumcision Status

HIV prevalence among uncircumcised men is 3.4 times greater than the prevalence among circumcised men.
Where did new infections occur?

- Heterosexual sex within union/regular partnership: 44.08%
- Casual heterosexual sex: 15.23%
- Female sex workers and Clients: 14.05%
- MSM and Prison: 14.05%
- Injecting Drug Use (IDU): 20.28%
- Health Facility Related: 2.52%
Key findings

• 2/3 of new infections are through heterosexual and partner contact.

• IDUs and MSM combined contribute up to 19% of new infections.

• Highest proportion of new infections in western part of Kenya (Nyanza Province) 30% – most likely linked to lack of circumcision.

• There is evidence of increased risk of HIV transmission in regular partners of sex workers, and regular partners of sex worker clients.
Key findings of KYE (Cont.)

- Sex workers and their partners remain a key population at risk of HIV infection, because of the frequency of concurrent partners and lack of consistent condom use.
- The clients of sex workers form a bridge population with the general population.
- Two factors which are considered as chief determinants of the HIV epidemic level in Kenya are strongly associated with culture:
  1. male circumcision, and
  2. societal acceptance of concurrent/multiple partnerships.
HIV Testing, Knowledge of Status & Discordance
...but we are far from the 2010 target of 80% universal CT coverage
Knowledge of HIV Status among HIV-Infected Participants

- 84% of HIV-infected adults did not know their status.
- 16% knew they were positive.
- 28% reported last HIV-test negative.
- 56% never tested for HIV.

Denominator: Lab-confirmed HIV infected participants (2% missing data on HIV testing history or known HIV status; 1% chose not to disclose status).
HIV Concordance and Discordance among Married or Cohabitating Couples

- 90.4% Concordant Negative Couple (Both HIV-uninfected)
- 5.9% Discordant Couple (1 HIV-infected)
- 3.8% Concordant Positive (Both HIV-infected)

~350,000 Couples
HIV Status of Married or Cohabitating partners of HIV-Infected Individuals

44% of married/cohabitating HIV-infected persons had an HIV-uninfected partner.

In 77% of all partnerships, respondents did not know their partner’s HIV status.

*Partner testing should be a core component of our HIV programs.*
Summary of Findings (i)

• Overall, no significant increase in prevalence since 2003, but increase among rural men; older adults and married persons at risk

• HIV testing increased since 2003; however, 84% of HIV-infected Kenyan adults did not know their status

• 350,000 HIV-discordant couples need targeted HIV-testing and prevention

• Modifiable risk factors for HIV: HSV-2 common, and lack of male circumcision tripled HIV prevalence
• Thank you