HIV/AIDS Admissions at KMH

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FINAL PRESENTATION
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## Projections for 2011

<table>
<thead>
<tr>
<th>Metric</th>
<th>Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total HIV Population</td>
<td>221,941</td>
</tr>
<tr>
<td>Prevalence (%)</td>
<td>1.5</td>
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<tr>
<td>Incidence (%) (15-49)</td>
<td>0.08</td>
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<tr>
<td>Total New Infections</td>
<td>12,891</td>
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<tr>
<td>Annual AIDS Death</td>
<td>16,320</td>
</tr>
<tr>
<td>HIV Population - Children 0-14</td>
<td>32,329</td>
</tr>
<tr>
<td>Children New Infection</td>
<td>3,476</td>
</tr>
<tr>
<td>All AIDS Orphans</td>
<td>177,640</td>
</tr>
</tbody>
</table>
Figure 11: Median HIV Prevalence 2000 - 2010, with Linear Trend
Women in Antenatal Clinic (2010)

Figure 3: HIV Prevalence by Region

- Eastern: 3.2
- Ashanti: 3.0
- Greater Accra: 2.6
- Western: 2.5
- Upper East: 2.4
- Brong Ahafo: 2.0
- Volta: 1.8
- Central: 1.7
- Upper West: 1.7
- Northern: 0.7
Figure 24: Brong-Ahafo Regional HIV Prevalence Trend, 2003-2010
Amongst Women in Antenatal Clinic (2010)

**Figure 9: HIV Prevalence by Type**

- **HIV I**: 96.0
- **HIV I & II**: 1.4
- **HIV II**: 2.6
HIV/AIDS Presentation at KMH - Purpose

- Amongst those who present for admission to the general ward at Kintampo Municipal Hospital
  - To identify new and/or existing HIV-positive persons
  - To determine the most typical secondary diagnoses requiring admission

- Following admission and discharge, in the outpatient setting, at the HIV Testing and Counseling (HTC) clinic
  - To determine compliance with HAART following confirmed HIV diagnosis
Presentations at KMH - Background

- **HIV in Kintampo**
  - Per HSS Report, sample size 461, 7 positive – prevalence approximately 1.5% in 2010 (2.1 in 2009)

- **Known clients in Kintampo north and south (2011)**
  - Per KMH electronic records, 139 men and 403 women attended HTC clinic (total 542)
  - Of these, 43/139 men and 121/403 women were newly diagnosed
## Presentations at KMH - Methods

- Retrospective and prospective review of in-patient logs and patient charts
- Retrospective review of outpatient records from HTC clinic
- Interviews with relevant medical staff and volunteers
Identification of HIV-infected persons at KMH

- Antenatal care (routine testing)
- Spouse or partner with known positive status
- In-patient admission/presentation
- Following initial positive testing with First Response (serum or whole blood), confirmation via HTC clinic with OraSure (oral swab or whole blood)
HIV Admissions

- January 1, 2012 – May 2, 2012
- 26 identified patients admitted to KMH general ward
- 17 women (1 pregnant), 9 men
- Aged 28 – 80 years old
- Pre-existing positive status, or positive First Response testing during admission
- 9 categories of admission diagnoses
- 37 diagnoses for 26 patients
Discharge Diagnosis

- Anemia – 19%
- CNS infection – 5.4%
- De-conditioning – 8.1%
- Diarrhea – 32%
- Gluteal-Sacral Abscess – 5.4%
- Malaria – 14%
- Osteomyelitis – 2.7%
- Pneumonia/TB – 11%
- Peptic Ulcer – 2.7%
HIV Testing and Counseling Clinic

- Referrals via ANC, in-patient admission and known spouse or partner

- In 2011, attendance totals
  - 542 persons (139 M: 403 W)
  - 4 lost to follow-up

- Total on ART (CD4 < 350, Stage 3 HIV/AIDS)
  - 360 persons (87 M: 273 W)
  - 66% (63% M: 68% W)
  - New ART regimen 128 persons (36 M: 92 W)

- Deaths
  - 16 (5 M: 11 W)
Analysis and Discussion

- Diarrhea comprised most admissions (32%), reflecting geographic trends in infectious disease and unsafe water sources.
- Anemia requiring transfusion another significant contribution to HIV morbidity (19%).
- Attrition amongst HAART patients less than 6% (deaths and lost to follow-up).
- Possible under-identification of men (vs. women of child-bearing age).
- Incidence in Kintampo (1.5%) and HAART attrition both below national averages (2% and 8%, respectively).
- Despite limitations in resources at the hospital level, excellent electronic records for HIV.
Limitations/Challenges

- Informed consent and IRB
- Identification of HIV patients
  - Ward logs
  - HTC clinic
- Precise diagnosis of AIDS
- Short period of analysis
  - Seasonal variations in disease presentations
  - Sampling error in both admissions and HTC
- Unknown/unspecified diagnoses
  - Anemia and diarrhea
- Deaths and lost to follow-up
  - Unknown cause of death or absence
Conclusions & Follow-up Questions

- Manageable HIV situation in KMH, and Ghana at-large, aided by exemplary passion (and resources) for identification and treatment
  - International funding, local HIV-positive volunteers
  - Infection incidence and HAART attrition below national averages

- Improved tracking and follow-up with diligent record-keeping and communication
  - Especially to ensure partner testing, particularly among men

- Hospital vs. HTC catchment/service area?

- Dietary counseling RE: water supply?
Thanks!

- Issah Andani (HTC Clinic, KMH)
- KMH Laboratory Staff
- Dr. Damien Pungiyire
- Dr. Alfred Yawsom
References

- NACP Annual Report, 2010
- HIV Sentinel Survey Report, 2010
- Kintampo Municipal General Ward Hospital Records
- KMH HIV Testing and Counseling Clinic
- Interim WHO Clinical Staging of HIV/AIDS and HIV/AIDS Case Definitions for Surveillance, 2005