MEDICALIZATION OF HIV AND THE AFRICA RESPONSE

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A Freedom song

Atieno washes dishes,
Atieno plucks the chicken,
Atieno gets up early,
Beds her sacks down in the kitchen,
Atieno eight years old,
Atieno yo.

Since she is my sister’s child
Atieno needs no pay,
While she works my wife can sit
Sewing every sunny day:
With her earnings I support
Atieno yo.

Atieno’s sly and jealous,
Bad example to the kids
Since she minds them, like a schoolgirl
Wants their dresses, shoes and beads
Atieno ten years old.
Atieno yo.

Now my wife has gone to study
Atieno is less free.
Don’t I keep her, school my own ones,
Pay the party, union fee,
All for progress: aren’t you grateful
Atieno yo?
Visitors need much attention,  
All the more when I work night.  
The girl spends too long at the market,  
Who will teach her what is right?  
Atieno is raising fourteen,  
Atieno yo.

Atieno had a baby  
So we know that she is bad.  
Fifty fifty it may live  
And repeat the life she had  
Ending in post-partum bleeding,  
Atieno yo.

Atieno’s soon replaced.  
Meat and sugar more than all  
She ate in such a narrow life  
Were lavished on her funeral.  
Atieno’s gone to glory,  
Atieno yo.

Marjorie Oludhe Macgoye
Regional Disparity

HIV Prevalence by Province

Nyanza
- Greater than national average: 15.1%
- Less than national average: 5%
- Less than 1%: 10%

Nairobi
- Greater than national average: 4.9%
- Less than national average: 6%

The rate of infection in Nyanza Province is more than twice the national average. Residents of Nairobi also have an elevated prevalence of HIV infection.

<table>
<thead>
<tr>
<th>Region</th>
<th>HIV Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>5.6%</td>
</tr>
<tr>
<td>Nyanza</td>
<td>15.1%</td>
</tr>
<tr>
<td>Nairobi</td>
<td>4.9%</td>
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</tbody>
</table>
Kenya & HIV

• 1.2 million people are HIV-infected
  • Two-thirds are women
  • HIV infection 3 times higher among women 20-24 than men the same age.

HIV Prevalence by Age

KDHS 2003
What is Medicalization?

• Medicalization:
  • some aspects of human life come to be considered as medical problems, whereas before they were not considered pathological\(^1\)

• Basis: biomedical model of disease
  • ... behaviors, conditions, or illnesses are seen as a “direct result of malfunctions within the human body“ and requiring biomedical oversight..

HIV is both a social and biomedical condition

**Social condition**
- Largely sexually transmitted
- Associated with stigma and prejudice
- Social determinants: lack of knowledge, gender imbalances, poverty, stigma, drug abuse etc.

**Biomedical condition**
- Caused by a retrovirus
- Results in immune deficiency
- Opportunistic infections
- Responds well to anti-retroviral medication
Anti-retroviral era heralded major advancements ...

Since the discovery of HIV, the advent of anti-retrovirals in the late 80s was arguably the most remarkable development in HIV/AIDS management.
... but innovative responses needed in Africa

Africa, despite being fertile ground for research due to its high HIV burden, lagged behind in the adoption of these advancements.
Family model of HIV care & treatment
Family AIDS Care and Education Services (FACES)

• Launched in 2004 in Kenya
• PEPFAR-funded through CDC
• Goal
  • Strengthen local healthcare systems to increase high-quality, comprehensive HIV prevention, care, and treatment services
• Provides technical support to Ministry of Health (MoH)
Family model of HIV care & treatment

Family model of care

1. Enrol index patient
2. Assisted disclosure
3. Test all family members
4. Enrol all HIV positive family members

Family-centred counselling and education
Family-centred clinic appointments and follow up
HIV prevention services
Counselling and support groups
Family planning services
Nutritional support
Children’s club
Case management & other support services

HIV Care and treatment enrolment

- Cumulative in care: 136,805
- Active in care: 75,318
- Cumulative on ART: 61,872
- Active on ART: 48,669
Mentorship Details

• Mentorship training
• Trained technical support
• Mobile support teams for MOH facilities
• Availability of Specialists for consultation
  • Dermatologist
  • Neurologist
  • OB/GYN
  • Pediatrician
• Overlap with support supervision
Task shifting

- Rationale
  - Solve human resource shortage
  - Improve decentralization
  - Quality of care purposes

- Levels
  - From MO/CO to nurses
  - From Nurses to lay health workers

- Lay health workers- CCHA, CEO, Peer educator, CHW
Uliza! Clinicians’ HIV Hotline

**Rationale:**
- rapid scale-up of HIV care in Kenya
- many clinicians have limited experience and training

**Approach:**
- a toll-free, 24/7 telephone consultation service
- utilizes the widespread cellular phone coverage

**Aim:**
- provide accessible expert HIV advice to care providers
- develop a hotline/referral model to expand to other regions within Kenya and other countries.
Sites Supported

Mbita Health Centre

Macalder Sub-District Hospital
PITC- The way to go

Know your HIV status
Prevention of Parent-to-Child-Transmission (PPCT)

• Integrate PPCT & HIV services within maternal and child health services; core components:
  • Universal access to counseling and testing
  • Primary prevention
  • Family planning
  • Standard package for prevention and care
Kid’s Club

- Psychosocial program
  - Enhance well-being
  - Art, poetry, song, dance, story-telling, games
- Parents/guardians:
  - Educational discussions on children issues
  - Peer support
Kid’s Club Soccer Program

• Sports-based HIV prevention program for HIV positive & negative youth
• Coaches are trained in HIV, first aid, and teaching techniques
• Youth receive HIV prevention messages integrated into soccer program activities
Sunburst Project: Peer educator program for HIV+ youth

• A model of best care for > 10,000 youth at FACES Clinics
• Empowering HIV/AIDS impacted youth to attain their highest potential
• Sunburst sites: 3
• HIV-positive children served: 409
• HIV-positive adolescents served: 1,644
• Peer Leaders Trained: 7

“The sunburst camp has helped me a lot, on how to take my drugs, how to take my medication on good time and not to skip even a single dose…”
~A Camp Sunburst Participant~
Integration of HIV care with existing health services
FP-HIV integration study

• **Study rationale:**
  • How best to meet the FP needs of HIV-infected women in Kenya.

• **Study design:** a cluster-randomized trial in Nyanza Province, Kenya
  • Intervention: integrating FP services into HIV care and treatment programs
  • Control: standard referral for FP services outside of HIV care and treatment programs.

• **Outcomes:**
  • contraceptive uptake, contraceptive continuation, and unintended pregnancy rates.

Funding by the Tides Africa and Bill and Melinda Gates Foundations
**Main finding:** 1.81 times higher odds of effective FP uptake in integrated sites compared to non-integrated sites.
The promise of Integration...

Integrating ANC and HIV services for pregnant women may result in:

- Better uptake of services,
- More women receiving counseling,
- Reduction of the time to treatment initiation,
- Reduction of stigma,
- Better utilization of resources.
The reality of ANC & HIV integration

Targets predominantly women and girls ignoring their male partners and the communities from which they hail from

- Can overburden already weak health systems in resource-limited settings by increasing the work load, leading to
  - Poorer service delivery
  - Poor sustainability of the integrated services
  - High attrition rates along the PMTCT cascade
Barriers to optimal PMTCT uptake that occur outside healthcare settings seriously hamper efforts to eliminate MTCT
Results

• Integration of HIV services into the ANC clinic was not associated with a reduced risk of MTCT HIV infection at 9 months - AOR 0.89 (95% CI 0.56-1.43)
• There was no difference in maternal health outcomes in integrated clinics compared to standard clinics
• Maternal deaths AOR 1.20 (95% CI 0.46-3.12)
• Integration of HIV services into the ANC clinic resulted in earlier initiation of HAART in eligible patients, however, no effect on retention into care
• Use of ARV during pregnancy AOR 3.5 (95% CI 1.73-7.23)
• Lost to Follow up AOR 0.74 (95% CI 0.38-1.46)
Mobile phone-based approaches
Voluntary Medical Male Circumcision post-op follow-up

• **Study rationale:**
  • a high proportion of men fail to return for their scheduled seven-day post-operative visit. Can text messages improve attendance?

• **Study design:** randomized controlled trial at 12 sites in Nyanza province, Kenya
  • Intervention: daily SMS text messages for 7 days
  • Control: usual care (no SMS)

• **Outcomes:**
  • Attendance at the scheduled seven-day post-operative visit

*Text Messaging to Improve Attendance at Post-Operative Clinic Visits after Adult Male Circumcision for HIV Prevention: A Randomized Controlled Trial* T. A. Odeny, R. C. Bailey, E. A. Bukusi, J. M. Simoni, K. A. Tapia, K. Yuhas, K. K. Holmes, R. S. McClelland | published 05 Sep 2012 | PLOS ONE 10.1371/journal.pone.0043832
Voluntary Medical Male Circumcision post-op follow-up

Text messaging resulted in a modest improvement in attendance at the 7-day post-operative clinic visit

<table>
<thead>
<tr>
<th>Study arm</th>
<th>Failed to return</th>
<th>Unadjusted</th>
<th>Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (%)</td>
<td>RR [95% CI]</td>
<td>p-value</td>
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<tr>
<td>Control</td>
<td>240/596 (40.3%)</td>
<td>1 (ref)</td>
<td>—</td>
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<tr>
<td>SMS</td>
<td>205/592 (34.6%)</td>
<td>0.86 [0.74-1.00]</td>
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<table>
<thead>
<tr>
<th>Transport cost to/from clinic (US$)</th>
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<th>Unadjusted</th>
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<tr>
<td></td>
<td>N (%)</td>
<td>RR [95% CI]</td>
<td>p-value</td>
</tr>
<tr>
<td>&lt;=US$1.25</td>
<td>324/929 (34.9%)</td>
<td>1 (ref)</td>
<td>—</td>
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<tr>
<td>&gt;US$1.25</td>
<td>121/258 (46.9%)</td>
<td>1.34 [1.15-1.57]</td>
<td>&lt;0.001</td>
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<thead>
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<th>Education level</th>
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<td>Primary or less</td>
<td>142/342 (41.5%)</td>
<td>1 (ref)</td>
<td>—</td>
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<tr>
<td>Secondary or higher</td>
<td>302/844 (35.8%)</td>
<td>0.86 [0.74-1.01]</td>
<td>0.06</td>
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RR, relative risk; SMS, short message service.
doi:10.1371/journal.pone.0043832.t003
Community Linkage

- Assess and respond to community health needs
- Increase HIV prevention, care, and treatment awareness, access, and service uptake
Peer volunteers for HIV care support

- Peer Internship Program
  - Recruit Persons Living with HIV/AIDS (PLWHA) from the community
  - 9-month training to be peer educators
- Responsibilities of peer-educator
  - Provide non-clinical support
  - Garnering peer support
  - Reducing HIV-related stigma
  - HIV education to patients,
  - Home visits and patient defaulter tracing
  - Facilitate support groups,
  - Clerical work
- PLWHAs often secure gainful employment within Faces-supported facilities or with other organizations.

PLWHAs an important source of inspiration and understanding.
Community Unit Structure

Facility-based staff: Nurses, CO, CCHA

CHEWS
1000 households per CU

CHWs

Households
20 per CHW
Economic approaches
Shamba Maisha: A micro-irrigation intervention for the HIV-infected

• **Rationale:**
  - HIV/AIDS negatively impacts poverty alleviation and food security
  - This hinders the rapid scale up and effectiveness of HIV care programs.

• **Study design:**
  - 30 HIV-positive patients enrolled in FACES Kisumu, Kenya provided with an irrigation pump and farming guidance

• **Outcomes:** Economic data, CD4 counts, household health and loan repayment history over a 12 month period.
Shamba Maisha: A micro-irrigation intervention for the HIV-infected

• Results
  • Mean annual family income increased by $1,332 from the baseline.
  • However, CD4 counts did not change significantly.

• Conclusions
  • An income-generating micro-irrigation intervention among HIV-positive patients is feasible.
Income generation through the Goat Project

- Launched in 2008
- 3 women’s groups, each received:
  - 10 local female goats
  - 1 purebred Saanen buck
  - A 3-day training on goat care, feeding, treatment, etc
- Benefits to the women:
  - Milk for home consumption
  - Income generation through milk sales and stud fees from the buck
Putting the response to HIV in context
Acknowledgements

- FACES (KEMRI-UCSF) staff
- FACES patients and their families
- Other stakeholders (AED, Concern, UNICEF)
- CDC
- Ministry of Health
- City council of Kisumu
- Dr Sara Gitome
- Dr Stella Njuguna
- The Director KEMRI