The CQUIN Learning Network

Patients at High Risk:
Perspectives from the Front Line

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AMPATH
Kenya

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HIV LEARNING NETWORK
The CQUIN Project for Differentiated Care

ICAP
GLOBAL. HEALTH. ACTION.
Columbia University
Mailman School of Public Health

Outline

- Introduction to AMPATH
- High Risk at ART Initiation Differentiated Care
- Failed Second Line Differentiated Care

Academic Model Providing Access to Healthcare (AMPATH)

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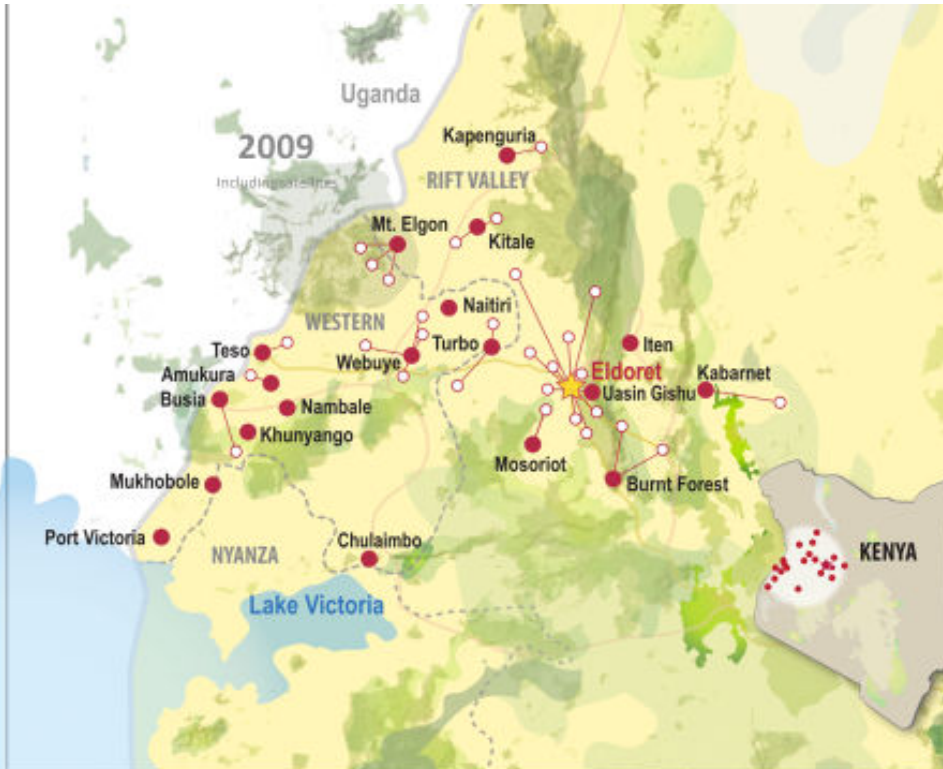
MOI TEACHING AND REFERRAL HOSPITAL
MTRH
ELDORET
AFFORDABLE QUALITY HEALTH CARE

MOI UNIVERSITY
FOUNDATION OF KNOWLEDGE

HIV Le... ...rk
Th... ...ntiated Care



Underpinnings of AMPATH

- Academic Partnerships: MU, IU with MTRH, MOH
- Electronic data repository: OpenMRS
- Institutional and GOK Support
- Own financial management: RSPO
- One central nervous system
- 85,000 patients on ARTs

High Risk at ART Initiation Differentiated Care March 2007 and March 2009,

Braitstein *et al. Journal of the International AIDS Society* 2012, **15**:7
http://www.jiasociety.org/content/15/1/7

JOURNAL OF THE INTERNATIONAL AIDS SOCIETY

RESEARCH Open Access

A clinician-nurse model to reduce early mortality and increase clinic retention among high-risk HIV-infected patients initiating combination antiretroviral treatment

Paula Braitstein[1,2,3,4*], Abraham Siika[1,2,3], Joseph Hogan[3,5], Rose Kosgei[3], Edwin Sang[3], John Sidle[1,2,3], Kara Wools-Kaloustian[1,2,3], Alfred Keter[3], Joseph Mamlin[1,2,3] and Sylvester Kimaiyo[2,3]

High Risk at ART Initiation Differentiated Care

- Retrospective analysis of prospectively collected routine clinical data.
- 4,958 patients initiated cART with CD4 counts of ≤100 cells/mm3.
- The nurse is responsible for interim weekly visits either physically or by telephone for a period of 3 months.
- Patients go directly to the “Express Care room”, which provides “one-stop care

Results: Probability of remaining Alive and in Care

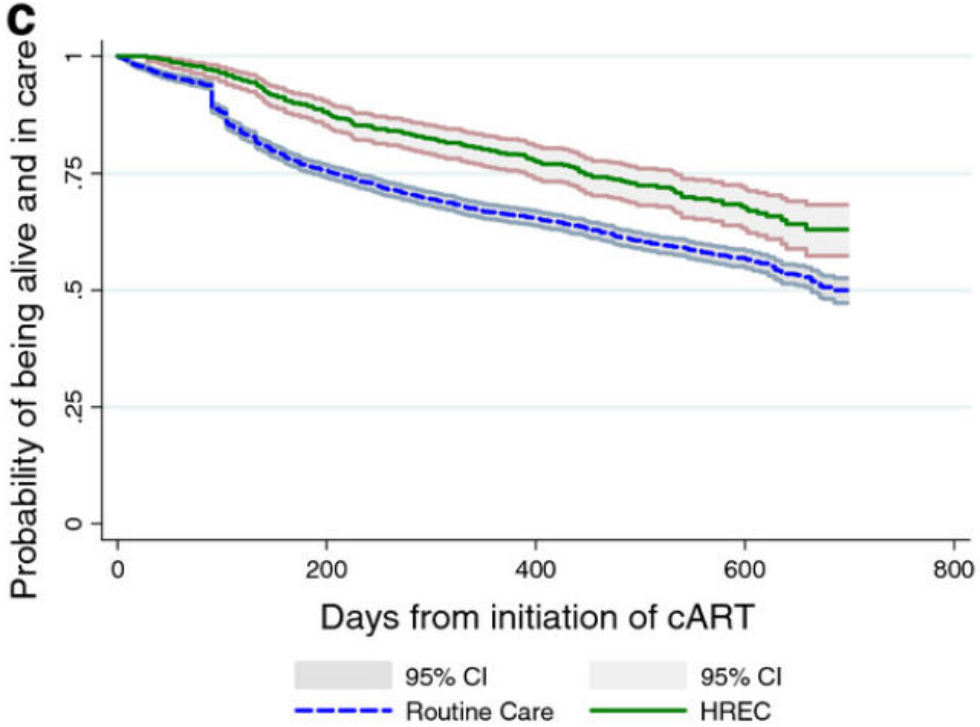


Figure 1 Kaplan-Meier curves demonstrating the effect of the High Risk Express Care compared with Routine Care among all high-risk patients on: a) their probability of survival; b) their probability of remaining in care (i.e., loss to follow up); and c) their probability of remaining alive and in care (n = 4958). a Probability of remaining alive after cART initiation. b Probability of remaining in care after cART initiation. c Probability of remaining alive and in care after cART.

Conclusions:

- Overall, patients were much more likely to be alive and in care after a median of nearly 11 months of follow up (AHR: 0.62; 95% CI: 0.57-0.67).
- Frequent monitoring by dedicated nurses can significantly reduce mortality and loss to follow up.

Failed Second Line Differentiated Care

Patients referred to the clinic between January, 2015 to May 2017

- Genotypic resistance testing performed per NASCOP guidelines at KEMRI-CDC lab in Kisumu
- Results used to design appropriate 3rd line ART regimens

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The Multidisciplinary Third Line Clinic Team

- Infectious disease specialist/physician,
- Pharmacist,
- Clinical officer,
- Peer counselors,
- Nurses,
- Nutritionists,
- Social work,
- Lab personnel

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The Multidisciplinary Third Line Clinic Team

- Review of medical history, ART history, laboratory results prior to patient arriving to clinic (Case Management)
- Aggressive management of side effects and social issues (pay transport when necessary, connect with social workers, support groups)
- Patients returned to their regular clinic after viral suppression achieved
- Use of Morisky score to assess adherence at clinic visits
- Suspected 2nd line failure, samples sent for genotypic to KEMRI/CDC
- Genotypic results discussed with clinic team, HIV resistance specialists, Dr. Mambo and NASCOP 3rd line TWG
- NyaWest Reviews

Patients seen by May 2017

- 164 patients with 2nd line failure from 17 different sites in Kenya had been referred and evaluated
- 6 were able to be changed to first-line regimens (no prior exposure)
- 135 were maintained on a second-line regimen.
- 23 Changed to 3rd line

The 23 on 3rd Line

- 41% male; mean age 40.2 years; mean 7.8 years on ART
- 20 due to confirmed resistance
- 2 due to renal transplant (drug interactions)
- 1 due to severe medication side effects
- **All patients on 3rd line have VL <1000 copies/ml**
- **No patients have reported adverse effects to 3rd line ART.**

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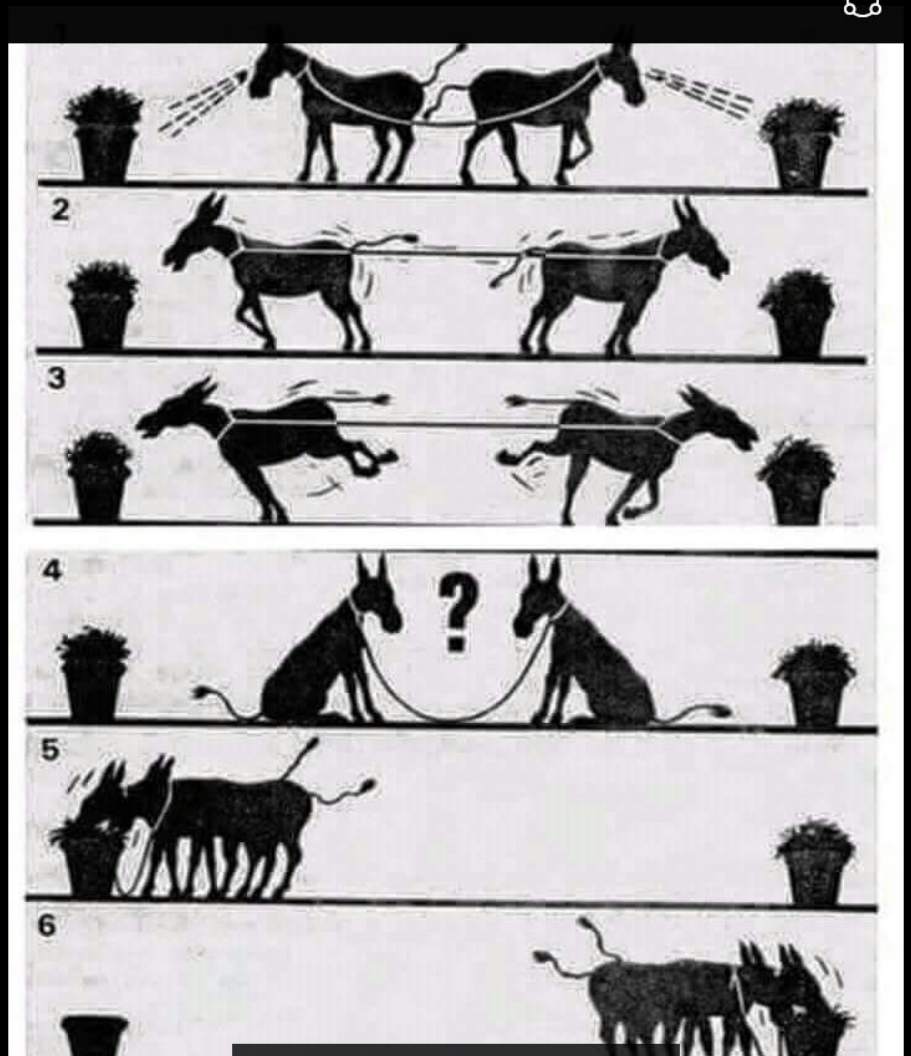

CHEPSAITA GROUP
With CO Kiprono sitting in front of the group

THANK YOU

Way Forward

- Successful Stable Differentiated Care gives more time for complex and unstable patients (HIV & NCD)
- The Stable Differentiated Care same system emerging for HIV will be modified to include the full range of NCDs. Same staff!
- We make more time to support community groups for mentoring, education and building trust.

Resistance Results

- Patient Age
  - <3 years 0
  - 3-14 years 0
  - 15-23 years 4
  - >23 years 16

- VL at/before time of DRT
  - <100,000 10
  - 100,000-500,000 6
  - >500,000 1
  - Unknown 3

Discussion

- A multidisciplinary HIV resistance clinic can help improve patient adherence to ART
- Increased use of ART in Kenya has led to patients with multi-class ART resistance
- Genotypic testing is crucial in designing appropriate 3rd line regimens
- Patients tolerate 3rd line well with no side effects

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- AMPATH Clinicians and Clinical Officers

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