Doctors of the World-USA: Use of Semi-Mobile Clinics in HIV/AIDS Treatment in Kenya

Vandana Tripathi, MPH; Sarah Hanck, MPH; Ann Reiner, MPH





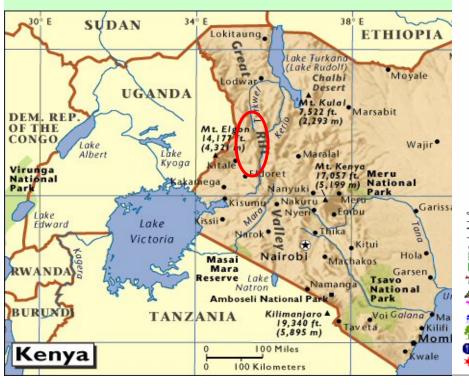


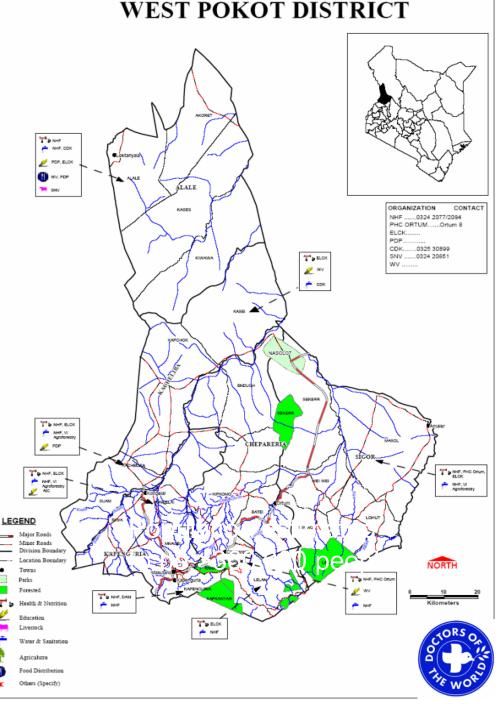




Program Location – West Pokot District, North Rift Valley

- Population >360,000
- 1 MoH Hospital, 1 private
 Hospital, 4 MoH Health Centers





CONTEXT – West Pokot District





Before DOW's Program:

- HIV prevalence in West Pokot est ~8% limited surveillance
- Though AIDS drugs introduced by MOH, limited capacity to manage treatment:
 - 44 enrolled by MOH early 2005; only
 10 remained by June
- Limited uptake at voluntary counseling and testing (VCT) sites, almost no provider-initiated or diagnostic testing and counseling (DTC)
- High stigma, no formal support systems for people living with HIV
- Limited prevention and education activities, low community knowledge about HIV treatment



Project Partners and Funders

Partners:

Academic Model for the Prevention and Treatment of HIV/AIDS (AMPATH) - Indiana and Moi Universities

Moi Teaching and Referral Hospital

Kapenguria District Hospital, West Pokot District Health Management Team

Local community-based organizations and traditional providers.

Funders:

Indiana University (via Columbia University/USAID), MAC AIDS Fund, Foundation for the Treatment of Children with AIDS, Lawson Valentine Foundation, Danellie Foundation, Johnson & Johnson, private donors.

Project Activities & Outcomes



>1,100 HIV+ people enrolled in care, 44% on ARVs

- HIV/AIDS clinic built at Kapenguria
 District Hospital opened 11/05
- Free, comprehensive clinical services provided by MoH staff trained, supervised, and supported by DOW and AMPATH
- Lab services, ARVs provided through AMPATH and Moi Teaching and Referral Hospital
- DOW staff provide support services working side-by-side with MoH
- All patients have access to support services, including peer support groups, home visits, educational seminars, nutritional supplements (based on SES criteria), and agricultural/livelihoods training
- Clinical/social services augmented by community education and testing





Semi-Mobile Clinic Model

First quarter of hospital-based clinic services revealed:

- Patients came late, with advanced AIDS illness
- Patients came from far away, some more >200 kms
- Returning for monthly visits presented burden on time, finances, confidentiality

DOW introduced semi-mobile clinic model

- Clinical team (at least 1 nurse, 1 CO, 1 social worker) travels to a rural health center (HC) weekly; each HC visited once a month
- People found to be HIV+ through ongoing testing asked to return to HC on semi-mobile clinic day
- Team brings ARVS, test kits, patient records, medical equipment, cold chain box, and food distribution.
- Onsite, patients receive clinical monitoring, medicines, and access to support services (e.g., support groups, food distribution)
- Blood samples taken to same reference lab as hospital samples



Semi-Mobile Clinic Model

Rationale/advantages

- Allows speedier roll-out of rural treatment, without training/infrastructure delays
- Maximizes geographic reach of reference laboratory
- Avoids quality challenges of training providers at lowvolume sites

Costs

- Initial purchase of vehicle
- Fuel
- Lunch or stipends





Questions for Analysis

Do patients seek HIV/AIDS care at semi-mobile sites?

Do semi-mobile sites:

- Reduce distance/time for patients to reach services?
- Have an effect on adherence, attendance, and survival?
- Have an impact on patient satisfaction?



Study Methods

Quantitative Data:

- Patient records provided information on age, sex, initial CD4 count, ARV status, travel time/distance, missed appts., loss to follow-up, and survival
- Staff reviewed:
 - All semi-mobile clinic records
 - Representative sample of hospital records (~5% of cases)
- Analysis conducted with SPSS; no attempt to determine statistical significance

Qualitative Data:

- DOW social work staff conducted structured interviews with semi-mobile and hospital clinic patients
- DOW program staff conducted structured interviews with providers at the hospital and health centers



Findings - Enrollment

- 16% of patients are seen at semi-mobile clinics
- Increased in rate of enrollment has coincided with semi-mobile clinics:

Month	New Patients Enrolled	
Before introduction of semi-mobile clinics		
Feb-06	51	
Mar-06	52	
After introduction of semi-mobile clinics		
Feb-07	82	
Mar-07	80	



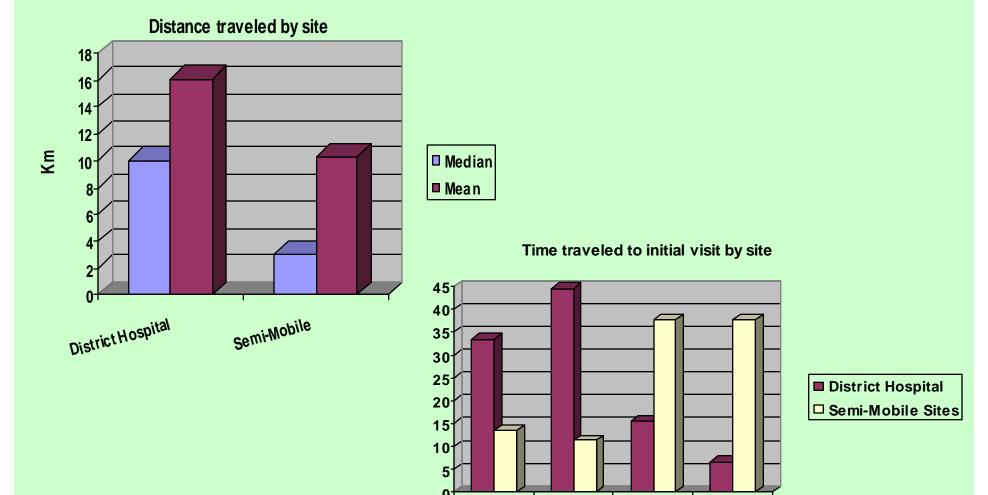
Findings - Demographics

Demographics				
	District Hospital	Semi-Mobile Sites		
Age (median)	33	32		
Pediatric cases (%)	18.8%*	20%		
Gender (female)	60.0%	66.9%		
Eligible for food	28.9%	58.1%		

^{*}Of total hospital patient base



Findings – Distance/Time





<30 min

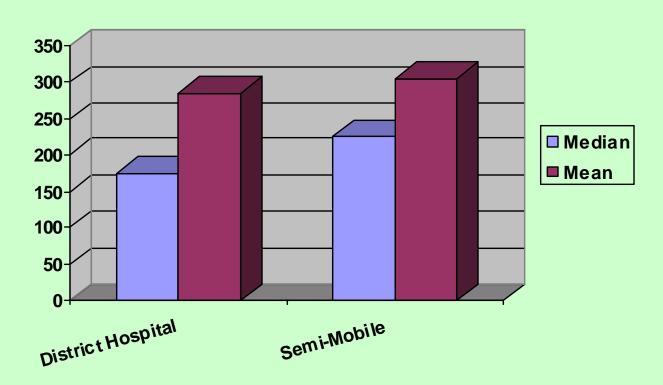
30-60min

1-2hrs

>2hrs

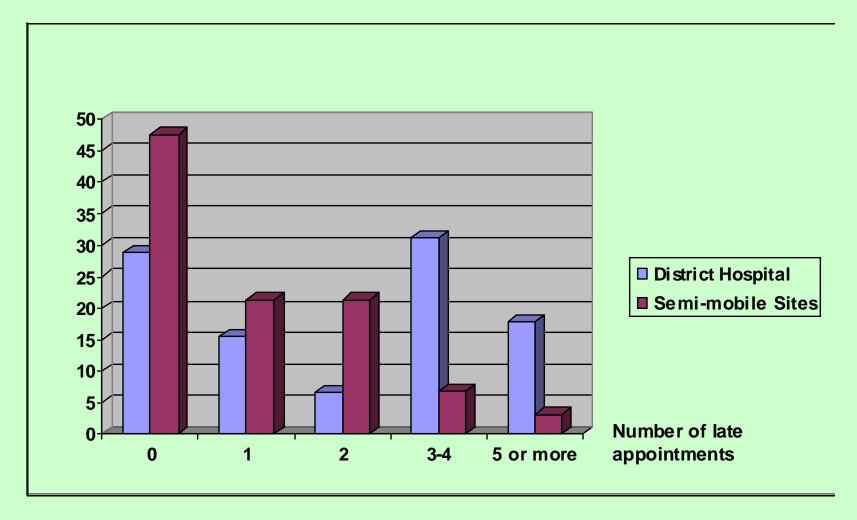
Findings – Initial CD4 Count

Initial CD4 count by site





Findings – Late Appointments*

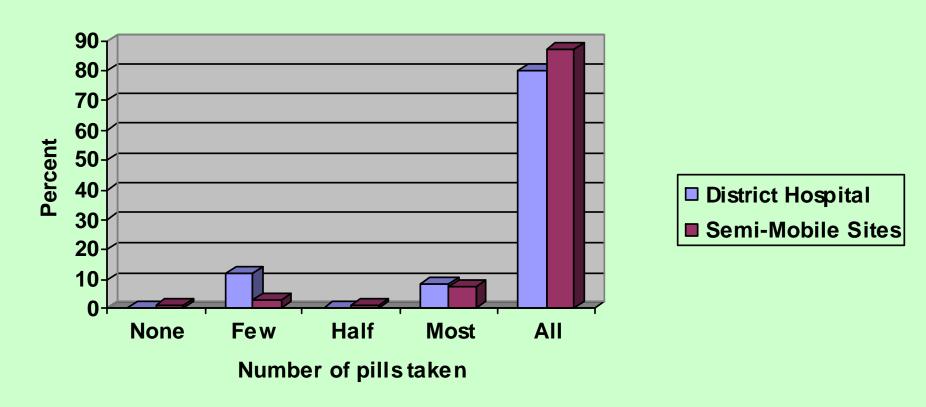


^{*}Late appointment indicates patient returned to clinic at a date later than scheduled



Findings – Adherence*

Number of pills taken in the last 7 days by site

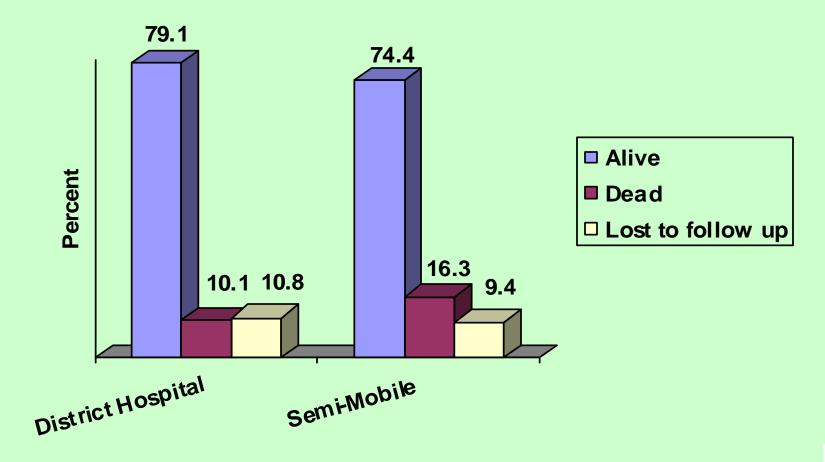


* Based on self-report



Findings – Survival and Retention in Care

Patient status by site





Findings – Patient Perspectives

Question/topic	Hospital	Clinics
Is it important to you to get services somewhere people do not know you? ¹	30% YES	14.5% YES
Do you worry about people in your community learning that you have HIV/AIDS? ²	20% YES	19% YES
Is the site where you get care your choice?	100% YES ³	78% YES ⁴
Are you happy with the care you receive at this site?	90% YES	100% YES
Do you feel the providers at this site care about your health? ⁵	100% YES	100% YES
Is it difficult for you to come to this site every month?	20% YES	24% YES ⁵
Were you enrolled in care elsewhere before coming to this site?	30% YES	51% YES ⁶



Findings – Provider Perspectives

"The patients complained that if you referred them to KDH they could not pay the transport. Now they are very happy and healthy. They come to visit me and tell me they are happy you come here and they are well taken care of."

- nurse at Chepararia Health Center

"There is also a lady from Chepareria, she has said plain she cannot go to Chepareria clinic, she rather comes here. Sometimes back when she used to attend the Chep clinic, she has a small biz in Chep center, so she says they were used to be labeled as going to the HIV clinic so people used not to buy from her, the *sukuma wiki*, the onions. So she preferred to come this way and not to be seen in Chep so she can continue doing her business."

- clinical officer at Kapenguria District Hospital

"Throughout all semi mobile clinics, we only have one patient who just this month is being started on second line drugs. otherwise, the patients are doing well with the regimen."

- nurse at Kapenguria District Hospital

"One of the problems I notice is when the vehicle comes they always associate it with AIDS. So when the vehicle is here they always assume about the patients. So if someone was here permanently, they would not know which one is that patient."

- clinical officer at Sigor Health Center



Preliminary Conclusions

Semi-mobile clinics can be an effective way to increase the reach of comprehensive AIDS services in very rural areas without compromising adherence or quality of care.

- Introducing mobile services requires a reliable, fixed point for record-keeping, procurement, and lab services
- Accessing care closer to home may correlate with earlier enrollment, greater adherence, and fewer missed appointments.
- The most vulnerable patients may benefit the most from reductions in distance from care; however, this vulnerability may also be associated with adverse health and survival outcomes.
- Many of those seeking care farther from home (i.e., the hospital) seem to be motivated by fear of stigma.



Thanks and acknowledgements

In addition to our generous donors, AMPATH, and the District Health Management Team, the authors wish to thank:

- Ruth Chepkemoi, DOW Social Worker, West Pokot
- Thomas Ondieki, DOW M&E Coordinator, West Pokot
- Marina MacNamara, founding DOW HIV/AIDS Project Director, West Pokot
- The HIV/AIDS clinic team at Kapenguria District Hospital
- The DOW social services and support team in Kapenguria
- The staff of West Pokot's rural health centers
- **Most importantly**: The thousands of patients, family members, volunteers, and community members who comprise this program, from across West Pokot and beyond