

The Warren Alpert Medical School of Brown University

HIV Testing in a Kenyan Emergency Department

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OBJECTIVE:

Resource poor communities, whether in sub-Saharan Africa or in inner cities in the Unites States, are often dually afflicted with both high HIV prevalence rates and limited resources to care for their sick populations. In these settings, screening for HIV becomes difficult to accomplish yet is ever more critically important. In 2006, Moi Teaching and Referral Hospital, in Western Kenya, initiated an HIV testing program in the emergency department (ED). This abstract reports on initial data collected from this HIV testing program.

METHODS:

We performed a retrospective log and chart review of the initial five months experience (January 2006- April 2006) of the ED – HIV testing program at one large referral center in Western Kenya. In addition, we performed a small case control study to determine the differences in age, gender, WHO stage, and CD4 count by patient referral source: ED vs. all other venues of referral combined.

RESULTS:

Patients were selected for HIV testing by a combination of routine screening and provider initiated referrals. 1,371 patients were approached for HIV testing. 1,339 (97.7%) of these patients were tested for HIV. 312 (22.7%) of patients tested were HIV positive.

Within a sample group of approximately 60 patients newly diagnosed with HIV in the ED, 82% were compliant with their initial HIV clinic visit and 65% were compliant with a 1-month follow-up visit.

The median CD4 count (75 cells/mm³) of patients referred from the ED from this sample group was lower than the median CD4 count (229 cells/mm³) of the patients referred from all other venues.

| 2006 | Patients approached | Patients who declined | Patients tested | Patients HIV Positive |
|----------|------------------------|--------------------------|-----------------|--------------------------|
| January | 165 | 6 (3.6%) | 159 (96.4%) | 32 (19.4%) |
| February | 163 | 2 (1.2%) | 161 (98.8%) | 46 (28.2%) |
| March | 190 | 2 (1.1%) | 188 (98.9%) | 40 (21.1%) |
| April | 344 | 6 (1.7%) | 338 (98.3%) | 86 (25.0%) |
| May | 509 | 16 (3.1%) | 493 (96.9%) | 108 (21.2%) |
| TOTAL | 1371 | 32 (2.3%) | 1339 (97.7%) | 312 (22.7%) |



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CONCLUSIONS:

The implementation of an ED-based HIV testing program in a high HIV prevalence and resource poor setting is feasible – with a high percentage of patients accepting HIV testing and a high percentage of positive patients presenting to follow-up care.

Establishment of rapid HIV testing in EDs can identify significant numbers of HIV positive patients who would otherwise remain undiagnosed as well as provide an educational opportunity for patients who are HIV negative.

Because many of the patients diagnosed with HIV in the ED are very far progressed (as demonstrated by their low CD4 count) diagnosis of these patients in the ED is imperative to preclude further delay of diagnosis, progression of HIV, and possible death

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