Relationship between Perceived Quality of Care and Adherence in Antiretroviral Therapy Treatment among HIV/AIDS Patients in Uganda, Kenya and Zambia

Martine Etienne
Mian B. Hossain
Anthony Amoroso
Kristen Stafford

AIDSRelief is a five member consortium, working in seven countries in Africa and two countries in the Caribbean and funded through the President's Emergency Plan for AIDS Relief (PEPFAR). It is a program designed to enable rapid scale-up of people on antiretroviral therapy. AIDSRelief works primarily through faith and non-faith based facilities that treat the most marginalized populations in predominately rural areas. Infrastructure has been put in place that will help maximize the number of people who will receive antiretroviral therapy in future years. AIDSRelief has also provided over 90,000 patients with ART and over 73,000 with care and support, working in over 150 treatment facilities. Scale up has been rapid yet cautious in an effort to maintain the integrity and quality of the programs.

Structured adherence support models needed to scale up antiretroviral therapy in resource poor settings are few. The increase in access to antiretroviral therapy in these settings has lead to the need to identify effective models that work and lead to successful treatment outcomes. As global antiretroviral providers we are tasked with providing innovative methods of HIV/AIDS care and management that will ultimately lead to successful treatment outcomes and a reduction in HIV infection rates.

AIDSRelief is committed to ensuring improved clinical outcomes and increased quality of life for people living with HIV/AIDS enrolled in its programs. Through a piloted

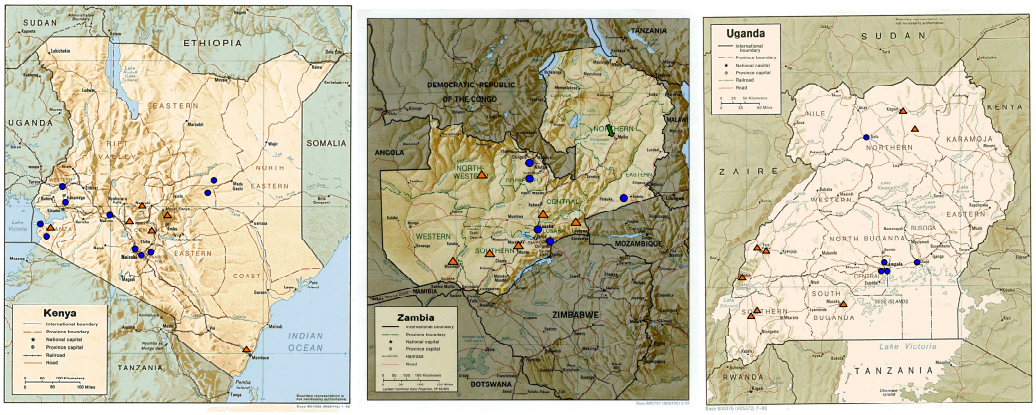
patient adherence survey, we developed and integrated indicators that measure patient and family quality of life and patient outcomes.

Data and methods: This was a retrospective, randomly selected review of medical charts of patients who had been on antiretroviral therapy for over twelve months. This analysis was conducted on 892 adult patients on antiretroviral therapy between August 2004 and April 2005. These patients were administered The AIDSRelief Adherence Survey and their viral load measures were taken. The AIDSRelief Adherence Survey was designed to identify specific indicators that influence adherence to antiretroviral therapy and increase in quality of life. This six component survey utilizing 46 questions was administered to the patient at the time of viral load sampling. Survey administrators were community health professionals trained using a unified source codebook. Components of the AIDSRelief Adherence Survey included, *Family & Support, Assessing Missed Clinic Appointments and/or Doses, Lifestyle & Risk Behaviors, Belief in Treatment, Socioeconomics, Support Provided by Clinic/Hospital, Depression & Mental Health, Assessing HIV/ART Knowledge*.

A "quality of care" score was constructed from indicators of survey including "refresher of HIV education", "continued counseling", "directly observed therapy (DOT)" or "weekly observed therapy (WOT)" had been administered, "continued community counseling", "home visits", "receipt of food", "receipt of transportation", "did patient feel they got the help they needed from the facility", "did patient feel a sense of privacy at the facility". Participated countries included Uganda, Kenya, and Zambia.

Bivariate and logistic regression was used to assess the relationship between perceived quality of care and antiretroviral therapy adherence.

Where we work:



Results:

Patients who lived further away from clinic were more likely to miss appointments in the last three months ($p<0.05$). The perceived quality of care scores were grouped from “low quality”, “medium quality”, and “high quality”. Those who scored in the medium range of the perceived quality of care scores, were less likely to miss clinic appointments in the last three months compared to those who experience low quality of care ($p<0.02$). Those who experienced high quality were also less likely to miss clinic appointments in the last three months compared to those who experienced low quality of care ($p<0.05$).

When ART knowledge scores are introduced in the model, they where also found to be an indicator of missing appointments in the last three months. Higher knowledge scores were associated with fewer missed clinic appointments in the last three months ($p<0.05$).

Conclusions:

Indicators such as distance to clinic, knowledge scores and missed appointments influence the quality of care perceived by patients coming to the AIDSRelief facilities. Evidence based findings such as these presented can be used to improve current programs and target interventions that will support continued scale up as well as optimal patient outcomes.

Table 1. Study sample

	Kenya	Zambia	Uganda
Gender:			
Male	202	90	104
Female	102	147	212
Age (mean)	39.3	39.2	38.8
Marital Status:			
Single/not married	33	32	52
Married	142	122	132
Widowed	107	60	119
Divorced	32	26	35