A Multidisciplinary Approach to Improving Adherence to Antiretroviral Therapy

Oswald Smith1, Thomas Minior1, Nicole Jordan1, Janice Woolford2, Debra Vitalis3, Deborah Storm1
1François-Xavier Bagnoud Center, School of Nursing, University of Medicine and Dentistry of New Jersey, Newark, New Jersey, United States
2Ministry of Health, Georgetown, Guyana, François-Xavier Bagnoud Center - Guyana, Georgetown, Guyana
3Ministry of Health, Georgetown, Guyana

GUYANA

- Located on the northeastern coast of South America, Guyana is culturally and politically closer to the Caribbean. Guyana is the only English speaking country in South America with a population of 760,000 and estimated HIV prevalence of 2.1%. Guyana has 20 HIV Care and Treatment sites (C&T) and uses mobile teams to reach remote interior regions.

Background

- Achieving adherence rates to antiretroviral therapy (ART) of >/=95% is associated with improved control of HIV replication, less resistance to ARV medications and less morbidity.
- Inadequate patient knowledge of medications, side effects and poor adherence can detract from the success of ART programs.
- Programs need cost-effective, reliable and valid strategies for routinely assessing and supporting ART adherence.

Multidisciplinary Adherence Support

- Developed and implemented a multidisciplinary ART adherence support and assessment model derived from Guyana’s national guidelines for HIV care and treatment (See Figure 1).
- Each month, the patient is asked to bring back remaining ART medications.
- Pharmacist assesses adherence by pill count and/or patient self report, including community outreach workers, social workers, nurses and physicians.
- HCWs provide adherence counselling at each point of contact with patients.
- HCWs provide counseling on factors affecting adherence and refer patients to appropriate community support networks and resources, including on/off site PLHIV peer support.

Lessons Learned

- A multidisciplinary model and standard protocol can yield impressive rates of ART adherence.
- From August to December 2007, 377 patient-months of ART were dispensed; adherence results are shown in Figures 2-3.
- Because patients often did not bring back medications as instructed, the majority of data are based on self-reported adherence.
- Several hurdles to adherence were identified:
  - Behavioural: depression, emotional stress, non-disclosure to family/loved ones
  - Physical: side effects of ART
  - Socio-economic: transportation cost to return for ARV refills, poor nutritional support
  - Staffing: staff turnover, need for ongoing training/retraining on adherence counseling
- Continuity of the staff pharmacist facilitated implementation of the model.

Figure 1. Adherence Counselling Flow Chart

Figure 2. Adherence Assessment Results

Figure 3. Documented Adherence Assessment at Last Visit

Next Steps

- Integration of the multidisciplinary approach to adherence at new HIV care and treatment sites.
- Development of strategies to increase return of medications for pill count.
- Ongoing identification of barriers to optimal adherence and devising suitable interventions.
- Closer collaboration with community-based resources.
- Ongoing dissemination of IEC materials on adherence to patients.