ADHERENCE TO HAART IN BANGALORE, INDIA

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PROJECT DESCRIPTION

The overall goal of this study is to examine patient and provider antiretroviral therapy (ART) adherence as well as factors leading to the development of ART drug resistance in public and private health care settings in Bangalore, India. Culturally appropriate adherence measures have been developed, including a measure of patient-initiated treatment interruptions. Barriers that interfere with adherence to ART and lead to treatment interruptions are being examined and potential adherence facilitators are being identified. These data will be used to develop and pilot test an ART adherence intervention in both settings.

In years 4-7 we plan to:

- Expand our initial study to the South Indian public health clinic setting, to apply, test and modify the adherence model developed for patients attending our private health clinic.
- Document the relationship between ART adherence and HIV-1 subtype C drug resistance patterns in a cohort of 500 patients recruited from both private and public clinic settings.
- Develop a culturally-appropriate, theoretically-guided and empirically-based ART adherence intervention and to pilot test and evaluate it first in our private clinic and subsequently in the public clinic setting.

SIGNIFICANCE

In the past few years, the landscape of HIV treatment has changed significantly in India. Increasing numbers of HIV+ individuals are receiving ART, both as a result of decreases in cost of generic medications and the introduction of government-sponsored free ART in a number of government clinics, where the majority of patients will soon receive their ART. Based on our findings to date, we have developed a working model of factors associated with patterns of ART adherence in a private health care setting and we will now develop and pilot test an adherence intervention there. However, given that the majority of Indians will soon be receiving ART at government clinics, we have extended our study to patients receiving their ART there as well. This will allow us to test our private clinic adherence model and develop an adherence intervention that meets the needs of Indian public health patients.

Given that only a limited number of first-line ART regimens are available at free or greatly reduced rates, prevention of the development of HIV drug resistance is critical to maximizing the efficacy and durability of these regimens. Recent data suggest that Non-Nucleoside Reverse Transcriptase Inhibitors, (NNRTIs), the cornerstone of standard first-line ART regimens in India, are most vulnerable to the development of clinically significant drug resistance as a consequence of poor adherence.

PROJECT END DATE: May 2011