Enhancing HIV treatment adherence in Bangalore: The Chetana Study

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Project Description

The study brings together researchers from the University of California, San Francisco and St. John's National Academy of Health Sciences in Bangalore, India. The overall goal of this study is to evaluate the impact of a promising Antiretroviral Therapy (ART) adherence-enhancing intervention grounded in Social Cognitive Theory (SCT) that addresses the needs of people living with HIV (PLHIV). This intervention targets not only medication adherence, but also other culturally-relevant topics designed to enhance physical and mental health among PLHIV, including yoga/meditation, nutrition, legal services, and assistance accessing local resources. We are testing this promising intervention in a Randomized Controlled Trial (RCT) among 500 sub-optimally adherent patients, comparing it to a time-matched active control condition, consisting of the non-adherence specific components of the intervention.

Specifically, we propose:

1. To evaluate the impact of the *Chetana* intervention on antiretroviral medication adherence and treatment outcome, as measured by self-report, viral load, Wisepill wireless monitoring, and medical chart review. We hypothesize that participants in the intervention arm will show a significant reduction in missed pills as well as a reduced number of treatment interruptions and improved viral suppression, compared to participants in the time-matched active control group.

2. To evaluate the impact of the *Chetana* intervention on reported adherence barriers. We hypothesize that participants in the intervention arm will report a significant reduction in number of adherence barriers, compared to participants in the time-matched active control group.

3. To examine wireless adherence monitoring as a predictor of treatment outcome. We hypothesize that this ongoing, objective real-time measure of adherence will better predict subsequent viral load than our self-reported Optimal Adherence measure that combines past month adherence and treatment interruptions.

Interesting Findings

The study may yield valuable information on improving adherence among sub-optimally adherent PLHIV in South India. Participation may help individuals develop strategies to improve adherence and minimize treatment interruptions. Because suboptimal adherence can lead to virologic failure and the development of drug resistance, developing and evaluating adherence-enhancing interventions are critical components of maximizing the durability of affordable HIV treatment options and the prevention of HIV drug resistance. This is especially true in Resource Limited Settings (RLS), where second line therapy may be unavailable or unaffordable.