Abstract

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Project Title: Fatigue in HIV-Positive People

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Abstract: DESCRIPTION (provided by applicant): Fatigue is the most frequent and debilitating complaint of HIV-positive people; it affects 20-69% of this population, limiting their ability to work, maintain relationships, and perform activities of daily living. While current research identifies physiological and psychosocial correlates of fatigue in seropositive people, results are conflicting, measurement of fatigue has not been specific to HIV-positive patients, and the data have been collected contemporaneously or retrospectively so it is not possible to know if the physiological and psychosocial changes precede fatigue and its worsening. To better understand fatigue in HIV-positive people and identify predictors of its occurrence and change, we propose to conduct a prospective, longitudinal study to address three aims: 1) to determine the level, circumstances, and consequences of fatigue in a group of community-dwelling HIV-positive individuals; 2) to determine at baseline the relationship of personal, HIV-related, physiological, psychosocial, and sleep quality variables to fatigue in HIV positive individuals; and 3) to determine prospectively the relationship of personal and HIV-related variables, and changes in physiological, psychosocial, and sleep quality variables to chronicity of fatigue (percentage of visits fatigued, level of fatigue over time) in HIV-positive individuals. The primary variables to be examined are HIV viral load, CD4 count, CD8CD38 count, testosterone, hemoglobin, depression, stressful life events, and sleep quality. Secondary variables include measures of hepatic, thyroid, immunological, gonadal, and hematologic function as well as salivary cortisol and cellular injury. Secondary psychosocial variables include anxiety and social support. A cohort of 125 HIV-positive individuals will be studied over a 3-year period, with study visits every 6 months and fatigue data collected between study visits via mail. Participants will be recruited from two large university infectious diseases clinics, a health department clinic for HIV-positive people, and a community-based AIDS service organization. They will be seen at the Duke University GCRC for assessment of physiological parameters, blood draws, and questionnaire and interview administration. Data will be analyzed using mixed effects models and multiple regression techniques. Results from this study will be used to guide the development of interventions to prevent or ameliorate fatigue in seropositive individuals.