# Increased Sleep Disturbances in Patients with HIV-Related Neuropathy

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## Introduction:

HIV+ patients who are otherwise asymptomatic experience subtle subjective and objective sleep abnormalities, but few studies have examined HIV+ patients with other medical comorbidities. Here, we examined subjective sleep patterns in HIV patients diagnosed with distal, symmetric, sensory-predominant polyneuropathy (DSPN) and compared these patterns to those in age matched normal controls.

## Methods:

Subjective sleep measurements were examined in 10 patients (ages: 39-50, all male) diagnosed with HIV DSPN and 10 normal controls (ages: 34-56, 6 female, 4 male) drawn from separate, but contemporary, studies. All participants completed a sleep diary assessing sleep quantity and quality for at least 4 days, Epworth Sleepiness Scale (ESS), Horn and Ostberg Morningness-Eveningness Questionnaire (MEQ), and a sleep questionnaire designed to qualitatively identify the causes and effects of sleep disruption.

### Results:

There were no significant differences between the groups in age, chronotype, habitual bedtime and habitual wake time. HIV+ patients reported significantly increased sleep latency, decreased sleep efficiency, decreased total sleep time, and a trend for increased wake after sleep onset. Patients also reported a significantly greater variety of factors leading to nighttime sleep disturbances. With respect to daytime sequela, patients showed a trend for being less refreshed upon awakening, and reported a significantly greater number and duration of naps. There were no differences in ESS scores. Finally, patients reported having "a typical night of sleep" significantly less often than controls.

### Conclusions:

The HIV DSPN patients reported experiencing significantly more disturbed sleep than normal controls, along with less refreshing sleep and more daytime naps. The lack of significant differences in the ESS scores suggests that napping may help patients offset daytime sleepiness. These results may be influenced by gender differences but the effect sizes suggest this is not a major contributing factor.