

**THE EFFECTS OF MELATONIN ON SLEEP IN HIV+ INDIVIDUALS:  
A PILOT STUDY**

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**BACKGROUND:** For persons with HIV infection, sleep disturbances are the third most common complaint in seeking medical attention. Seventy percent of this clinical population report insomnia. Insomnia includes difficulty in falling asleep (latency), disturbed sleep or frequent wakings (efficiency), or changes in the sleep cycle. Insomnia leads to fatigue, excessive debilitating daytime sleepiness, and a significantly diminished quality of life (QOL). **PURPOSE:** The purpose of this 5-week study was to test an intervention designed to reduce insomnia, therefore, improving QOL by shifting circadian rhythms. **METHODS:** A prospective, randomized, double-blind, placebo controlled clinical trial was used (N=6). Six subjects were randomized into one of three treatment groups: 1mg melatonin, 5mg melatonin, or placebo. Subjects were admitted to the General Clinical Research Center (GCRC) for week 1 to obtain baseline sleep efficiency and latency scores, along with endogenous melatonin and cortisol levels. Subjects were then sent home for three weeks with one of the above treatment groups. Week 5 they return to the GCRC for post evaluation of the same variables. **RESULTS:** Due to the limited number of subjects in each group (pilot work) inferential statistical analysis was not possible but data were examined for trends. Preliminary data indicate that pre/post QOL scores have improved on subjects receiving the melatonin. CD3/4/8 levels improved over the 5 week period on the subjects receiving melatonin (viral loads were undetectable to the beginning and end of the study). Sleep efficiency increased in the melatonin group by 33%. Sleep latency changed from one hour to 10 minutes on two of the melatonin subjects. **CONCLUSIONS:** Exogenous melatonin has the potential to shift circadian rhythms, correcting insomnia therefore improving QOL. This has been identified in the subjects receiving melatonin. Pilot work was successful in determining the procedures and recruitment strategies. **IMPLICATIONS:** Further nursing research is needed to improve sleep related problems that would enhance quality of life in HIV infected individuals. **FUNDING:** AD Williams Foundation