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## TWO FACES OF THE LIGHT

### Summary

Circadian rhythms are found in most organisms, including humans. Variation of ambient light intensity is the main cue influencing circadian rhythms. Sleep-wake cycle is the most evident example of circadian rhythm. In this article the basic mechanisms associated with neurobiology and neurophysiology of the sleep are described.

Sleep Disorders Health Center was established at the Institute of Psychiatry and Neurology in Warsaw in 2001. For the first twelve years, only 3 patients were diagnosed with somnambulism. However, during the last two years the number of such cases increased to 27. and 24 of these patients were under 35 years old and all of them used a computer for several hours before bedtime. This behavior, characteristics of young adults, is one of reasons of the increased occurrence of somnambulism observed in recent years. In particular, light emitted by computer screens disturbs sleep.

Light is used to treat seasonal affective disorder, delayed or advanced sleep phase, and others. Routine phototherapy involves daily, 30 minute exposition to light with the filtered out ultraviolet and at the intensity of 10000 Lux. The efficacy of such treatment was corroborated in our Center for patients with seasonal depression, delayed sleep phase and advanced sleep phase. Thus, while light can adversely affect human health it can also be used as an effective medical treatment.