Sleep-Wake Disturbances in People With Cancer
Part I: An Overview of Sleep, Sleep Regulation,
and Effects of Disease and Treatment

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Purpose/Objectives: To provide an overview of normal sleep, describe
common sleep disorders, and discuss underlying sleep regulatory pro-
cesses and how cancer, cancer treatment, and associated patient re-
sponses may adversely affect sleep.

Data Sources: Published peer-reviewed articles and textbooks.

Data Synthesis: The duration, structure, and timing of sleep have a
profound impact on health, well-being, and performance. Patients with
cancer may be at risk for disturbances in sleeping and waking resulting
from disease- and nondisease-related circumstances that interfere with
normal sleep regulation, including demographic, lifestyle, psychological,
and disease- and treatment-related factors.

Conclusions: Patients with cancer are at high risk for sleep-wake dis-
turbances.

Implications for Nursing: An understanding of normal sleep, sleep pa-
thology, and the factors that can precipitate sleep disturbance provides
a context for nurses to interpret sleep complaints in their patients, evaluate
responses to sleep-promoting interventions, and guide decision mak-
ing regarding referrals.

Key Points . . .

➤ The normal sleep-wake cycle is controlled by internal and ex-
ternal factors.
➤ Sleep disorders include an array of problems that are charac-
terized by insomnia, excessive daytime sleepiness, or abnor-
mal movements, behaviors, or sensations during sleep.
➤ A complete assessment of sleep examines nocturnal and day-
time sleep-wake patterns.
➤ Patients with cancer experience complex and interacting fac-
tors that can adversely affect sleep-wake patterns.

In December 2001, the Oncology Nursing Society (ONS)
held a retreat for advanced practice nurses to develop stra-
tegic plans to address critical issues in advanced oncology
nursing practice. The members of the Evidence-Based Practice

Goal for CE Enrollees:
To enhance nurses’ knowledge about factors that influence
sleep in people with cancer.

Objectives for CE Enrollees:
On completion of this CE, the participant will be able to
1. Describe the normal sleep-wake cycle.
2. Describe how cancer and cancer treatment can affect sleep
patterns.
3. Outline the clinical implications of current evidence about
interventions for sleep-wake disturbances in people with
cancer.
4. Identify needs for further research related to sleep distur-
bances in people with cancer.