

CONTINUING EDUCATION

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

Catherine Vena, MSN, RN, Kathy Parker, PhD, RN, CS, APN, FAAN,
Mary Cunningham, MS, RN, AOCN®, Jane Clark, PhD, RN, AOCN®, APRN-BC,
and Susan McMillan, PhD, ARNP, FAAN

Purpose/Objectives: To provide an overview of normal sleep, describe common sleep disorders, and discuss underlying sleep regulatory processes and how cancer, cancer treatment, and associated patient responses 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 disturbances.

Implications for Nursing: An understanding of normal sleep, sleep pathology, 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 making regarding referrals.

Key Points . . .

- ▶ The normal sleep-wake cycle is controlled by internal and external factors.
- ▶ Sleep disorders include an array of problems that are characterized by insomnia, excessive daytime sleepiness, or abnormal movements, behaviors, or sensations during sleep.
- ▶ A complete assessment of sleep examines nocturnal and daytime sleep-wake patterns.
- ▶ Patients with cancer experience complex and interacting factors that can adversely affect sleep-wake patterns.

In December 2001, the Oncology Nursing Society (ONS) held a retreat for advanced practice nurses to develop strategic 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 disturbances in people with cancer.



Catherine Vena, MSN, RN, is a PhD candidate and Kathy Parker, PhD, RN, CS, APN, FAAN, is the Edith F. Honeycutt professor, both in the Nell Hodgson Woodruff School of Nursing at Emory University in Atlanta, GA; Mary Cunningham, MS, RN, AOCN®, is a coordinator in pain and palliative care in the Ellis Fischel Cancer Center at University of Missouri Health Care in Columbia; Jane Clark, PhD, RN, AOCN®, APRN-BC, is an oncology nursing consultant and was a clinical coordinator in oncology services at Emory University Hospital in Atlanta, GA; and Susan McMillan, PhD, ARNP, FAAN, is the Lyall and Beatrice Thompson professor of oncology quality-of-life nursing in the College of Nursing at the University of South Florida in Tampa. (Submitted December 2002. Accepted for publication October 30, 2003.)

Digital Object Identifier: 10.1188/04.ONF.735-746