State of the Science: Hot Flashes and Cancer,
Part 2: Management and Future Directions

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Purpose/Objectives: To critically evaluate and synthesize intervention research related to hot flashes in the context of cancer and to identify implications and future directions for policy, research, and practice.

Data Sources: Published, peer-reviewed articles and textbooks; editorials; and computerized databases.

Data Synthesis: Although a variety of pharmacologic and nonpharmacologic treatments are available, they may not be appropriate or effective for all individuals.

Conclusions: The large and diverse evidence base and current national attention on hot flash treatment highlight the importance of the symptom to healthcare professionals, including oncology nurses.

Implications for Nursing: Using existing research to understand, assess, and manage hot flashes in the context of cancer can prevent patient discomfort and improve the delivery of evidence-based care.

Part two of this state-of-the-science review focuses on two topics. First, research on pharmacologic and nonpharmacologic interventions is reviewed. Second, implications and future directions for research, policy, and practice are described. Similar to Part 1 (see page 959), much of the information presented is specific to cancer. However, data from healthy populations of men and women also are discussed.

Interventions

Pharmacologic and nonpharmacologic treatments for hot flashes are reviewed here and summarized in Tables 1 and 2. Although an exhaustive review was attempted, additional reviews by nationally known scientists will be forthcoming in peer-reviewed journals as a result of the 2005 National Institute on Aging conference on the management of menopause-related symptoms. In addition, several existing reviews are acknowledged (Barton & Loprinzi, 2004; Barton, Loprinzi, & Gostout, 2002; Carpenter, 2000; Clemons, Clamp, & Anderson, 2002; Holzbauerlein, Castle, & Thrasher, 2004; North American Menopause Society, 2004).

Most of the studies reviewed in this article are limited in two ways. First, most studies focused on healthy women or women with breast cancer. Findings from healthy women may not generalize to women with breast cancer or other populations because of differences in the underlying etiology of hot flashes (Moyad, 2002). In addition, although hot flashes in the groups appear to be physiologically similar (Carpenter, Gilchrist, Chen, Gautam, & Freedman, 2004), the higher frequency and severity of hot flashes experienced in breast cancer survivors (Carpenter, Johnson, Wagner, &...