

# Hot Flash Experience in Men With Prostate Cancer: A Concept Analysis

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**Purpose/Objectives:** To provide a clear definition of the hot flash experience in men with prostate cancer receiving hormonal treatment.

**Data Sources:** Articles, book chapters, and electronic sources.

**Data Synthesis:** The hot flash experience has not been explored previously in men with prostate cancer. The physiologic and psychological scopes of the phenomenon are described as a multidimensional experience.

**Conclusions:** The essential attributes of hot flashes in men consist of physiologic (e.g., warmth, sweating, chills) and psychological (e.g., anxiety, impaired memory, agitation) factors. Antecedents to the experience include demographics, disease, and treatment modality. Consequences include effects on sleep, cognition, and health-related quality of life.

**Implications for Nursing:** Evaluation of the hot flash experience in men receiving hormonal ablation should include assessment of the symptoms associated with the treatment modality and nursing interventions to help ameliorate symptoms. Future research is needed to focus on providing symptom management to decrease the severity or prevent the occurrence of multiple symptoms related to androgen ablation therapy.

The concept of the hot flash experience in men has received minimal attention in the medical literature and none in the nursing literature. Unfortunately, the severity, natural history, and associated symptoms of hot flashes in men have not been studied widely (Stearns et al., 2002). Hot flashes have been well recognized as a significant clinical problem in menopausal women and women treated for breast cancer. However, the experience is also a significant problem for men treated with androgen ablation for prostate cancer. Hot flashes are a side effect of androgen ablation, which is based on the hypothesis that the tumor is androgen dependent (Frodin, Alund, & Varenhorst, 1985; Loprinzi et al., 1998). Prostate cancer is the most prevalent cancer in men, and an estimated one in six will develop the disease in his lifetime (American Cancer Society, 2005). Worldwide, prostate cancer is the most frequent cancer diagnosis of the urogenital tract in men. Most of the studies that mention hot flashes in men with prostate cancer have been done in countries other than the United States, such as England, Belgium, Sweden, Finland, the Netherlands, and the Slovak Republic (Cervenakov, Kopecny, Jancar, Chovan, & Mal'a, 2000; Empson & Purdie, 1999; Stearns et al.; van Andel & Kurth, 2003).

In 1895, Hugh Cabot, MD, studied the effects of castration on the treatment of prostatic enlargement and was the first to describe hot flashes in men as uncomfortable flushes of

## Key Points . . .

- Conceptual clarification of the hot flash experience in men is needed to allow oncology nurses to effectively assess and manage the cluster of symptoms by developing interventions to improve symptom management.
- Health-related quality of life is an outcome measurement of symptom management. Decreasing the number and severity of symptoms in the hot flash experience may increase the overall health-related quality of life of this patient population.
- Further research is needed to investigate the physiologic measurements of hot flashes and sleep disturbances in men with prostate cancer.

heat that are similar to those experienced by women during menopause (Kouriefs, Georgiou, & Ravi, 2002). Almost 50 years later, in 1941, Huggins, Stevens, and Hodges demonstrated the dependence of prostate cancer on androgens. In their study, 9 of 21 castrated patients experienced hot flashes beginning two to three weeks after surgery.

The purpose of this article is to provide a clear definition of the hot flash experience in men with prostate cancer who are receiving hormonal treatment. Concept analysis is a method that allows researchers to examine and clarify the defining attributes of a concept. Currently, no concept analysis of hot flashes exists in the literature. The framework of Walker and Avant (1995) is used to provide a clear definition, the identifying antecedents, the defining attributes, and the consequences of the concept. A model and borderline case also are presented.

## Literature Review

Men with prostate cancer diagnosed as metastatic or locally advanced disease are presented with treatment options

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