## Using Web-Based Interventions to Support Caregivers of Patients With Cancer: A Systematic Review

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n estimated 1.66 million individuals will be diagnosed with cancer in the United States in 2015 (American Cancer Society, 2015). Many will require aid from a family caregiver, contributing to about 66 million people who serve as unpaid caregivers to someone who is ill, disabled, or older aged (National Alliance for Caregiving & AARP, 2009). The responsibilities of caregivers of patients with cancer can include physical care and mobility assistance, management of symptoms, distribution of medications and monitoring side effects, providing emotional support, decision making, and communication with family members about disease status and progression. Although unpaid caregivers often attain satisfaction from engaging in these responsibilities to reduce suffering for their loved ones, caregiving is associated with physical, social, and emotional burdens such as increased blood pressure, heart attack scares, arthritis flare-ups, acid reflux, headaches, role strain, isolation, anxiety, sexual issues, fatigue, and added demands that can affect work performance (Collins & Swartz, 2011; Evercare & National Alliance for Caregiving, 2006; Stenberg, Ruland, & Miaskowski, 2010). Caregivers also have significantly higher levels of depression than their noncaregiver counterparts (Pinquart & Sörensen, 2003). In addition to the concomitant morbidities, caregiving can greatly influence mortality. According to a seminal study by Schulz and Beach (1999), strained elderly spousal caregivers were 63% more likely to die within four years than non-caregivers. Caregiving reduces work productivity by 19% and increases the likelihood of the caregiver leaving the workplace, resulting in a loss of wages, health insurance, job benefits, retirement savings or investments, and Social Security benefits (Family Caregiver Alliance, 2012). The negative impact of caregiving reported throughout the literature necessitates the need for interventional services.

**Purpose/Objectives:** To explore the literature to examine the physical, social, psychological, financial, usability, and feasibility outcomes of web-based interventions on caregivers of people with cancer and to identify potential trends in this body of evidence.

Data Sources: PubMed, CINAHL®, PsycINFO®, and Inspec.

**Data Synthesis:** Six articles met inclusion criteria. Across studies, most caregivers were middle-aged female spouses with some college attendance who felt "somewhat comfortable" using the Internet. Caregiver interventions used single- and multicomponent services and reduced negative mood.

**Conclusions:** Web-based caregiver interventions can be beneficial in offering information and support and may positively influence the social and psychological outcomes in this population.

**Implications for Nursing:** Many studies described caregiver Internet usage and interventional perceptions and needs, but few have examined the impact of web-based interventions on caregivers. More research is needed to produce high-quality evidence in this population.

Key Words: caregivers; Internet; neoplasms

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## Background

Gaugler et al. (2009) suggested that having adequate support networks could help to prevent feelings of loneliness, isolation, and other depressive symptoms associated with cancer care. Traditional interventions to address caregiver burdens, delivered in person or by telephone, have been widely studied. These interventions can encompass a variety of modalities including psychoeducation, problem solving and skills building, supportive therapy, family or couples therapy, cognitive-behavioral therapy, complementary and alternative medicine, and existential therapy (Applebaum & Breitbart, 2013). Several systematic reviews and