

# Effects of Acupuncture and Acupressure on Cancer-Related Fatigue: A Systematic Review

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**T**he National Comprehensive Cancer Network (NCCN, 2014) defined cancer-related fatigue (CRF) as a “distressing persistent, subjective sense of physical, emotional and/or cognitive tiredness or exhaustion related to cancer or cancer treatment that is not proportional to recent activity, and interferes with usual functioning” (p. FT-1). CRF is one of the most common and distressing symptoms in patients with cancer (Chan & Molassiotis, 2000; Given, 2008; Haghighat, Akbari, Holakouei, Rahimi, & Montazeri, 2003; Kohara et al., 2004; Stone & Minton, 2008) that affects 50%–100% of patients (Campos, Hassan, Riechelmman, & Del Giglio, 2011; Newton, Hickey, & Marrs, 2009; Prue, Rankin, Allen, Gracey, & Cramp, 2006; So et al., 2009) and is a complex and multidimensional phenomenon (Chan, Chair, & Chui, 2009; Escalante & Manzullo, 2009; Given, 2008; Kirshbaum, 2010; Morrow, 2007). Contrary to acute fatigue, CRF is unlikely to be relieved by rest, sleep, food, or water (Chan et al., 2009; Given, 2008; Kirshbaum, 2010; National Cancer Institute [NCI], 2012; Prue et al., 2006). It may last for 5–10 years after the completion of treatment in many cancer survivors (Andrykowski, Donovan, Laronga, & Jacobsen, 2010; Bower et al., 2006; Crom, Hinds, Gattuso, Tyc, & Hudson, 2005; Given, 2008; Stone & Minton, 2008).

Patients with CRF may find it difficult to perform even simple daily activities (Curt et al., 2000). They may also suffer from psychological side effects (Curt et al., 2000; Morrow, 2007; NCI, 2012) and be forced to quit their jobs and limit social interaction (Chan & Molassiotis, 2000; Curt et al., 2000). These adverse effects can extend to the primary caregivers and family who will be required to spend more time taking care of patients (Chan & Molassiotis, 2000; Curt et al., 2000). It then undermines the family's financial well-being, giving rise to anxiety, worry, and feelings of guilt (Chan & Molassiotis, 2000; Curt et al., 2000).

The exact etiology of CRF remains unclear (Given, 2008; NCCN, 2014; Wang, 2008), and CRF has no single

**Purpose/Objectives:** To critically examine the evidence for acupuncture and acupressure in the management of cancer-related fatigue (CRF) in adult patients with cancer.

**Data Sources:** 18 databases were searched for randomized, controlled trials published in English and Chinese through April 2014.

**Data Synthesis:** Given the heterogeneity of data, meta-analysis was not conducted. A six-step thematic analysis method was used to synthesize the results.

**Conclusions:** Although results are inconclusive, acupuncture and acupressure tend to be effective in relieving CRF, with the former producing a greater improvement. Future research is recommended to contribute further evidence.

**Implications for Nursing:** Nurses should know about the relative effectiveness of acupuncture and acupressure in the management of CRF to educate and support their patients.

**Key Words:** fatigue; cancer; acupuncture; acupressure; systematic review

*ONF*, 41(6), 581–592. doi: 10.1188/14.ONF.581-592

cause (Chan & Molassiotis, 2000; Ryan et al., 2007; Stricker, Drake, Hoyer, & Mock, 2004). A number of contributory factors have been identified, including tumor burden, treatment-related effects, and comorbidities (e.g., malnutrition, infection, organ failure, renal insufficiency, thyroid dysfunction, pain, sleep disturbance, psychological challenges, ineffective personal coping) (Kirshbaum, 2010; Wang, 2008). Coexistence of and interplay between fatigue, pain, sleep disturbance, and psychological challenges have been frequently reported in the literature (Beck, Dudley, & Barsevick, 2005; Dodd, Miaskowski, & Paul, 2001; Fox, Lyon, & Farace, 2007; Maliski, Kwan, Elashoff, & Litwin, 2008; Prue et al., 2006; So et al., 2009).

Management of CRF includes pharmacotherapy, elevation of hemoglobin, exercise, energy conservation, activity management, psycho-educational interventions, diet and nutrition management, sleep therapy, management of distressing symptoms, and complementary and