

# Expectancy Effect of Acupuncture on Cancer-Related Outcomes: A Systematic Review

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**PROBLEM IDENTIFICATION:** Previous reviews have reported the efficacy of acupuncture in managing cancer-related symptoms. However, there is a lack of comprehensive reviews examining how patients' expectancy regarding acupuncture influences treatment outcomes in the context of cancer survivorship.

**LITERATURE SEARCH:** 9 databases were searched for articles published through August 2023. The authors included acupuncture studies that reported on patient expectancy for the effectiveness of acupuncture.

**DATA EVALUATION:** 10 studies were included in this review. Study quality was assessed using the Cochrane risk-of-bias tool and the ROBINS-I (Risk Of Bias In Non-randomised Studies-of Interventions) tool.

**SYNTHESIS:** 5 studies explored the relationship between expectancy and cancer-related outcomes, and in 3, expectancy was significantly associated with reduced pain, frequency of bowel movements, and severity of insomnia. Male and older patients, nonresponders to acupuncture, and those with lower education levels had lower expectancy regarding acupuncture.

**IMPLICATIONS FOR NURSING:** Healthcare providers should assess patient expectancy to comprehensively understand its role in improving acupuncture outcomes.

**KEYWORDS** acupuncture; cancer; expectancy; symptom; systematic review

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**C**ancer survivorship is defined as the experience of living with, through, and beyond a cancer diagnosis (Denlinger et al., 2014; National Cancer Institute, 2024). Although the prevalence of cancer continues to increase in the United States, early detection and treatment have resulted in more patients surviving and living longer (Miller et al., 2022). As of 2021, more than 18 million people, or 5.4% of the total U.S. population, identified as cancer survivors (American Cancer Society, 2022; Miller et al., 2022). Cancer survivors often face substantial cancer symptom burdens, as well as short- and long-term side effects during and after treatment (Miller et al., 2022). Fatigue, pain, and sleep disturbance are the most common symptoms among cancer survivors (Kokkonen et al., 2019), and these symptoms negatively affect quality of life (Durán-Gómez et al., 2023), cognitive function (Rodriguez et al., 2021), and adherence to cancer treatment (Miller & Evers, 2022). The need to reduce multiple cancer-related symptoms and enhance quality of life for cancer survivors has spurred the use of complementary and integrative health (CIH) therapies (Zia et al., 2017).

## Acupuncture

Acupuncture is a widely practiced CIH therapy grounded in traditional Chinese medicine (Hao & Mittelman, 2014). Illness is seen as a sign of imbalance in the body's energy, or qi, and acupuncture is aimed at restoring balance and treating disease by stimulating the body's natural healing ability (Van Hal et al., 2023). Acupuncture is intended to stimulate the balance and flow of qi within pathways called meridians, which allows individuals to achieve physical, emotional, and mental aspects of well-being (Vanderploeg & Yi, 2009). With more than 10 million treatments administered in the United States annually, acupuncture has become one of the most