

# Feasibility of a Reflexology and Guided Imagery Intervention During Chemotherapy: Results of a Quasi-Experimental Study

Gwen Wyatt, PhD, RN, Alla Sikorskii, PhD, Azfar Siddiqi, PhD,  
and Charles W. Given, PhD

**Purpose/Objectives:** To evaluate patient characteristics to predict selection and maintenance of a complementary therapy and the feasibility of a randomized clinical trial (RCT) of complementary therapies.

**Design:** Quasi-experimental, exploratory study, unblinded and non-randomized.

**Setting:** A comprehensive cancer center in Michigan.

**Sample:** 96 patients undergoing chemotherapy, predominantly Caucasian women.

**Methods:** Consenting patients with caregivers could choose a reflexology, guided imagery, guided imagery plus reflexology, or interview-only group. Patients without caregivers were restricted to guided imagery or interview-only groups. Data on demographics, depression, anxiety, and functional status were collected using established instruments.

**Main Research Variables:** Quality of life (QOL) and patient characteristics in relation to complementary therapy choice.

**Findings:** Patients who chose a complementary therapy rather than an interview only tended to be older and in worse health and had higher percentages of lung cancer, late-stage cancers, higher anxiety, depressive symptoms, and physical limitations at baseline. Patients lost from the guided imagery and guided imagery plus reflexology groups had greater symptom severity, depressive symptoms and anxiety, and worse physical and emotional well-being than those lost from the reflexology group.

**Conclusions:** Patient characteristics influence choice of complementary therapies, highlighting the need for RCTs to evaluate the true effect of complementary therapies on the QOL of patients with cancer. Further research on complementary therapies can help healthcare providers identify patients who are likely to benefit most by addressing nursing-sensitive outcomes.

**Implications for Nursing:** An RCT of reflexology as a single therapy for females with breast cancer is most feasible compared to other complementary therapies.

## Key Points . . .

- Selection of the appropriate complementary therapy for patients is critical.
- Feasibility work should be done before investing in a full-scale randomized clinical trial of any complementary therapy.
- Complementary therapy research can meet the same “gold standard” as other clinical trials with a carefully thought-out design.

phrase “complementary and alternative medicine” also is used commonly, as is “integrative therapies,” but because the present study focuses only on supplemental therapies, the appropriate phrase is complementary therapies.

To contribute to the body of knowledge on complementary therapies, this quasi-experimental exploratory study evaluated the types of patients with cancer most inclined to participate in complementary therapies, the strength of self-selected therapies to maintain patient involvement over time, and the feasibility for use in a randomized clinical trial (RCT). The goal of this article is to demonstrate the need for RCTs through a descriptive study and current literature. Quasi-experimental research lays the necessary groundwork for the next RCT. Participant characteristics that were outcome variables of interest included quality-of-life (QOL) domains and related variables that may affect QOL for patients with cancer as they move through the course of treatment. Participants could select to be in one of four groups: a guided imagery group (with or without a family caregiver), a reflexology group (with a family caregiver), a guided imagery plus reflexology group (with a family caregiver), or participation only in interviews without taking part in a complementary therapy. Patients’ demographic characteristics, QOL, and illness-related variables were evaluated in relation to

Motivated by the desire to become active participants in their treatment, patients with cancer are increasingly turning to complementary therapies (Wyatt, Friedman, Given, Given, & Beckrow, 1999). Studies show that complementary therapies are used by 60%–80% of patients with cancer (Boon et al., 2000; Richardson, Sanders, Palmer, Greisinger, & Singletary, 2000). Individuals interested in complementary therapies often use them in hopes of augmenting the efficacy of the treatment they receive from their conventional healthcare providers (Eisenberg et al., 1998; Guzzetta, 1996; Jonas, 1998). Complementary therapies are defined as treatments used in addition to conventional care as a complement or supplement (Cassileth, 2000). Alternative therapies are used in the place of conventional health care (Harpham, 2001). The

*Gwen Wyatt, PhD, RN, is a professor, Alla Sikorskii, PhD, is an assistant professor, and Azfar Siddiqi, PhD, is a research associate, all in the College of Nursing; and Charles W. Given, PhD, is a professor in the Department of Epidemiology in the College of Human Medicine, all at Michigan State University in East Lansing. (Submitted June 2006. Accepted for publication October 19, 2006.)*

Digital Object Identifier: 10.1188/07.ONF.635-642