

Presented at the Society for Integrative Oncology, Sixth International Conference  
New York, November 13, 2009

**Randomized Controlled Trial of Family Caregiver Use of Massage as  
Supportive Cancer Care following Multimedia Instruction<sup>1</sup>**

William Collinge, PhD, MPH, Collinge and Associates  
Janet Kahn, PhD, NCTMB, University of Vermont College of Medicine  
Tracy Walton, MS, LMT, Private Practice  
Kenneth Fletcher, PhD, University of Massachusetts Medical School

**Abstract**

**Purpose.** Massage is one of the most effective forms of supportive care in cancer, but access to professional practitioners is limited for most patients. This abstract presents findings from an NCI-sponsored randomized controlled trial (RCT) of family caregivers using simple techniques of touch and massage as supportive care guided by a home-based multimedia instructional program. The project assessed effects on (1) patient symptoms and side effects, (2) patient quality of life, and (3) caregiver attitudes toward use of touch as a form of caregiving.

**Method.** A community-based, multi-ethnic sample of 97 adult caregiver-patient dyads were randomized to experimental or attention control conditions for four weeks. The sample consisted of sixty-three white, thirteen Black, ten Chinese, eight Hispanic, and three mixed-ethnicity dyads. Twenty-three types of cancer and all stages were represented. All data collection and instructional materials were produced in English, Spanish, and Chinese language versions.

Instruction was provided in a 78 minute DVD featuring instruction by two oncology massage therapy researchers (JK, TW), filmed in a workshop context with eleven patient-caregiver dyads (white, black, Hispanic and Asian) learning and practicing the techniques. Content addressed communication, safety precautions related to cancer (lymphedema, etc.), manual techniques for comfort and relaxation, acupressure, simple light touch/holding for comfort, and positioning on home furniture. A 70-page illustrated manual accompanied the DVD.

Experimental dyads were instructed to view the materials as often as they wished and practice techniques of their choice at least three times per week. Control caregivers were instructed to read to the patient from literature of the patient's choice at least three times per week. Both groups recorded "session effects" on one 20-minute "reporting session" per week, using 5x8 inch cards. Patients completed a two-sided card that reported pre- and 15 minutes post-session ratings of severity levels (10 point scale) for pain, fatigue, stress/anxiety, nausea, depression, and an optional "other." Safety monitoring for massage dyads was conducted by home visit observation by an oncology massage therapist. At baseline and 4 week follow-up, subjects also completed survey instruments assessing quality of life, stress, and caregiver attitudes. After the RCT both groups were merged into the massage condition for a longitudinal study of utilization and effects over 20 weeks (longitudinal data to be reported separately).

**Results.** Session data showed significant reductions for all symptoms after both activities. Reductions after reading ranged from 12-28%, and after massage, 29-44%, as follows: pain, 18% vs 34%; fatigue, 20% vs. 32%; stress/anxiety, 28% vs. 44%; nausea, 12% vs. 29%; depression, 22% vs. 31%; other, 17% vs. 42%. Massage was significantly superior to reading for stress/anxiety ( $p<.01$ ), pain ( $p=.04$ ), fatigue ( $p=.01$ ), and other ( $p<.01$ ). Caregivers in the massage condition showed significant gains in their confidence and comfort with using touch and massage as forms of caregiving.

**Conclusion.** A multimedia instructional program in massage as supportive care at home offers family members a viable means of enhancing self-efficacy and satisfaction in caregiving. Family members can learn and apply safe and simple methods that increase patient comfort, reduce distress, and improve quality of relationship.

---

<sup>1</sup> Sponsored by NCI grant # R44CA103606