

Reflexology Review

# EFFECTS OF PARTNER-DELIVERED REFLEXOLOGY ON CANCER PAIN AND ANXIETY

PENNY ROBERTSHAW

Stephenson NLN, Swanson M, Dalton J, Keefe FJ, Engelke M. Partner-delivered reflexology: effects on cancer pain and anxiety. *Oncology Nursing Forum* 2007;34(1):127–132.

## Aim Of Study

This study was conducted to compare the effects of partner-delivered reflexology treatments on perceived pain and anxiety in patients with metastatic cancer.

## Method

Eighty-six participants with diagnosed metastatic cancer, with a pain score of two or higher on a 0–10 pain scale completed this study. The mean age of participants was 58.3 years of which 51% were female. Sixteen types of cancer were represented.

Forty-two participant couples formed the reflexology group and 44 couples formed the control group. One 30 minute partner-delivered intervention was administered to cancer afflicted participants in the reflexology group. Prior to study commencement, partners in the reflexology group were trained by a certified reflexologist to give a reflexology treatment. The partners practised on the patients or on the trainer, and feedback was given. Partners were also given written materials to study at home.

The first ten minutes and the last five minutes of the partner-delivered reflexology session involved relaxing techniques. The intervening 15 minutes were spent reflexing corresponding areas of pain, cancer sites, immunity areas (pituitary, thyroid and adrenal glands) and the solar plexus. Patients in the control group were read a selection of writing of the patient's choice. During the study period both groups received usual care.

## Measurements

Pain was measured using the Brief Pain Inventory (BPI). This inventory contains a 0–10 pain scale that rates pain at its worst, best, average and 'right now'. Another 0–10 scale allows patients to convey how their pain interferes with general activity, mood, walking, work, sleep, relationships and life enjoyment. Pain location is indicated on a diagram that also shows how much relief is obtained from medication.

In addition to the BPI, the Short-Form McGill Pain Questionnaire (SF-MPQ) was used to measure pain. This questionnaire describes pain in terms of its sensory experience. It uses words such as throbbing, stabbing, shooting, sharp, cramping, burning, tender and gnawing. To describe

the affective experience of their pain, patients are asked to express it with words such as tiring, exhausting, sickening, fearful, punishing and cruel. The words used in this questionnaire were ranked from 0–3 with 0 representing 'none' and 3 representing 'severe'. Pain intensity was measured on a 10 cm scale with 0 representing 'no pain' and 10 'worst possible pain'.

Anxiety was measured using the Visual Analog Scale for Anxiety. This scale is a 10 cm vertical line that begins at 0 to indicate 'not anxious at all' and ends at 10 to indicate 'extremely anxious'. Questionnaires were completed immediately prior and at the completion of the treatment.

## Results

The reflexology group showed a 34% reduction in pain after intervention compared to the control group's 2% reduction. Results were also analysed for a sub-group of patients with moderate to severe pain scores prior to treatment. In this sub-group, the reflexology group experienced a 37% reduction in pain compared to a 6% reduction in the control group.

Anxiety scores for the total group showed a 62% improvement in the reflexology group compared to 23% in the control group. These results were also observed in the sub-groups, whereby anxiety in the reflexology group decreased by 67% compared with the control group's 31% reduction.

## Conclusion

The researchers concluded that:

study findings indicate that partner-delivered foot reflexology results in an immediate effect in decreasing pain and anxiety in patients with metastases.

## Limitations Of The Study

The researchers acknowledged that because the person training the partner reflexologists also administered the questionnaires, there may have been a lack of complete objectivity and the chance of bias.

Measurements taken at time points in the future would have determined the duration of pain relief and anxiety reduction. It is also not evident whether further reflexology treatments would yield the same benefits. A longer term study would clarify these issues. ❖

Copyright of *Journal of the Australian Traditional-Medicine Society* is the property of Australian Traditional-Medicine Society and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.