The Use of Acupuncture for Cancer-Related Pain Symptoms: An Evidence-Based Practice Intervention Project
By Stephanie Balsom, Tatiana Dumenova, Angela Palmer
Advisor Dr. Mary Burckett

Abstract: It is estimated that 1.7 million people will be diagnosed with cancer in the United States in 2016. Approximately 40-85% of cancer patients suffer from cancer related pain. Cancer itself and the side effects of cancer treatment often cause intense pain not alleviated by traditional pain strategies that continue to affect the patient long after treatment has ended. Acupuncture has been shown to affect perception of pain and increase the effectiveness of traditional opioid pain management strategies. The purpose of this evidenced-based project was to evaluate the effect of acupuncture on adult cancer related pain. By examining current research literature, eight Quantitative studies with levels I, II, IIB evidence and two Qualitative studies from Phenomenology and Grounded Theory were identified as relevant to the use of acupuncture in the management of cancer pain. The resultant synthesis table of these studies revealed acupuncture was a safe and efficacious adjuvant treatment for the management of cancer pain and improved quality of life. Both Quantitative and Qualitative studies indicated physical and psychological benefits of acupuncture, a reduction in side effects and in the need for pain medication. In addition, the Qualitative studies showed the patients’ perception of regaining control. The evidence supports a practice change to incorporate acupuncture into the pain treatment strategy for the adult oncology patients.

Summary of Appraised Evidence
Review of the literature resulted in selection of 8 quantitative articles with Level of Evidence ranging from I through IIB and 2 qualitative articles from Grounded Theory and Phenomenology both with Level of Evidence of IIB.
- Acupuncture was a safe and efficacious adjuvant treatment for the management of cancer pain
- Physical and psychological benefits of acupuncture
- Reduction in side effects and in the need for pain medication.
- Patients perceived CAM therapy as an effective modality to improve quality of life
- Perception of regaining control increased.
- Psychological benefits including decrease stress and anxiety, better ability to cope, decreased pain and better quality of sleep

Intervention Synthesis

<table>
<thead>
<tr>
<th>Study</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<td>Paley</td>
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<td>Randomized Control Trial</td>
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<td>Adult cancer patients</td>
<td>Adult women, stage I/II, positive breast cancer</td>
<td>Adult liver cancer patients</td>
<td>Adult breast, head, neck, or chest cancer patients with mild-moderate lymphoedema</td>
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<td>Pain</td>
<td>Pain</td>
<td>Pain</td>
<td>Pain</td>
<td>Pain</td>
<td>lymphoedema</td>
<td>Pain</td>
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</tbody>
</table>

Legend: Interventions with evidence of effectiveness do not have a symbol. Acupuncture associated with improvement.

Implications for Practice
The evidence supports a practice change to incorporate acupuncture into the pain treatment strategy for the adult oncology patients.
- Acupuncture effective as an adjuvant to current cancer pain regimens
- Patients viewed CAM therapy, including acupuncture, as beneficial and improved quality of life

Searchable PICO
During the background search, the following PICO was developed using databases Cochrane, Medline, and EMBASE.
- Intervention: Adult oncology/cancer patients (P) do acupuncture or acupressure (O) affect pain (L)?
- Meaning: How does acupuncture affect pain in cancer patients (P)?
- Databases used include CINAHL, PubMed, MedlinePlus, Alt Health Watch, Cochrane, Health Source Academia

References:

Spirit of Inquiry
A local hospital was looking into process improvement for palliative care for cancer patients, specifically pain control.
- Could complimentary and alternative medicine (CAM) provide additional outlets to provide pain relief for cancer patients?

Background Information
- 1.7 million people will be diagnosed with cancer in the United States in 2016.
- Approximately 40-85% of cancer patients suffer from cancer related pain.
- Side effects from cancer and/or cancer treatment often cause intense pain.
- CAM, specifically acupuncture, has been shown to affect on cancer pain.

Approximately 40 million people will be diagnosed with cancer in the United States in 2016. Approximately 40-85% of cancer patients suffer from cancer related pain. Cancer itself and the side effects of cancer treatment often cause intense pain not alleviated by traditional pain strategies that continue to affect the patient long after treatment has ended.

Acupuncture has been shown to affect perception of pain and increase the effectiveness of traditional opioid pain management strategies. The purpose of this evidenced-based project was to evaluate the effect of acupuncture on adult cancer related pain. By examining current research literature, eight Quantitative studies with levels I, II, IIB evidence and two Qualitative studies from Phenomenology and Grounded Theory were identified as relevant to the use of acupuncture in the management of cancer pain. The resultant synthesis table of these studies revealed acupuncture was a safe and efficacious adjuvant treatment for the management of cancer pain and improved quality of life. Both Quantitative and Qualitative studies indicated physical and psychological benefits of acupuncture, a reduction in side effects and in the need for pain medication. In addition, the Qualitative studies showed the patients’ perception of regaining control. The evidence supports a practice change to incorporate acupuncture into the pain treatment strategy for the adult oncology patients.

This work was conducted as part of a Research Methods Class and is not designed to contribute to generalizable knowledge.

Cochrane, Health Source Academia