Effect of a Brief Seated Massage on Nursing Student Attitudes to Touch for Comfort Care

Paul C. Turkeltaub,¹
Edilma L. Yearwood,¹
Erika Friedmann,²
Georgetown University School of Nursing and Health Studies¹
University of Maryland School of Nursing²
Background CAM

- NCCAM defines CAM as a group of diverse medical practices that are not presently considered to be part of conventional medicine.
- 83 million adults utilize CAM in U.S.
- Out-of-pocket cost: ~$33.9 billion/yr
- CAM use increased in chronic conditions
- CAM most often used for pain (back/neck) followed by self-defined anxiety or depression

Sherman et al (2010) Depress Anxiety
Background

CAM

- CAM use significantly associated with health literacy  
  Bains & Egede (2011) BMC CAM

- CAM more commonly used by women of reproductive age: 49% reporting use  
  Smith et al. (2012) Cochrane Library

- Higher CAM use associated with health seeking behaviors: treating health problems- pain/enhancing health- preventing disease  
  NCCAM 2010

- CAM increased in higher SES/education
Background

CAM: MASSAGE


- Massage most often used to treat conditions that limited functional ability. Okoro (2011) Comp Ther Med.

- Massage involves manipulation of the body’s soft tissues to help relax tense muscles and to soothe and calm.
In exercise induced muscle damage, 10 min. massage reduced inflammatory mediators and promoted mitochondrial biogenesis. (Crane et al, 2012, Sci Trans Med)

In Breast cancer fatigue, massage lead to an immediate increase in HRV. Increased HRV was associated with decreased fatigue and improved mood. Mood improvement was dependent on a positive attitude to massage. (Hernandez-Lao et al, 2012, Eur J Cancer care)
In breast cancer, depression significantly reduced immediately after massage Krohn (2011) Support Care Cancer

In bone Mets, improved mood, relaxation, and decreased pain Jane (2011) Pain

In healthy subjects increased cervical ROM and decreased EMG signal Selfon (2011) Manual Ther

In postmenopausal, decreased BDI, improvement in insomnia, and MENQOL Oliviera (2012) Climacteric

PURPOSE

- To compare the effects of two different intensities of touch [high (H) vs low (L)] in two brief seated massages on the attitudes of nursing students to touch for their own self care and for utilization by them in patient care
A convenience sample of nursing students gave IRB informed consent to undergo a 15 minute seated massage by a CMT.

Each subject received L or H touch in a block 2 randomized order within-subject design.

Questionnaire/VAS pertaining to physical/affective/and attitudinal status were obtained before and after each massage.

Linear mixed models nested within subject to control for carryover effects were performed.
Demographics (N = 29)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean (SD)</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>26.68 (6.97)</td>
<td></td>
</tr>
<tr>
<td>Gender: female</td>
<td></td>
<td>27 (93.1)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, not of Hispanic origin</td>
<td></td>
<td>24 (82.8)</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td></td>
<td>24 (82.8)</td>
</tr>
<tr>
<td>Nursing Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd Degree</td>
<td></td>
<td>18 (62.1)</td>
</tr>
<tr>
<td>Prior Massage Experience</td>
<td></td>
<td>21 (72.4)</td>
</tr>
</tbody>
</table>
Touch Intensity
(0=No Pressure; 10=Most Intense Pressure Imaginable)

Perceived Touch Intensity
Optimum Low Dose High Dose
Touch Intensity Scale
0
2
4
6
8

p < .001

Touch Intensity Scale

Optimum
Low Dose
High Dose

Perceived Touch Intensity

p < .001
Improvement (%) After Massage

![Graph showing percent improvement for Low Dose and High Dose with p < .001 difference.]

- Low Dose
- High Dose

Percent Improvement

Touch Intensity

- Low Dose
- High Dose

p < .001
Comparison of Improvement After High and Low Dose Massage

* p < .05
Likelihood of Receiving and Providing Touch
(-10=Much Less Likely; 10=Much More Likely)
Conclusion

- A brief massage of sufficient intensity elicits significant improvement in overall and multiple domains of well being.

- Nursing students experiencing such an effective massage have a significant increase in their likelihood of being both a future recipient of massage for their self care as well as a provider of massage for patient care.
Massage in Nursing

- Historically the nurse has provided basic comfort measures that included massage
- Guided by Nightingale in 1860, St. Thomas Hospital Nurse Training School included massage as part of nurses’ training and qualifications
- Evidence of massage efficacy/CAM utilization should help refocus attention on massage in the nursing curriculum as a therapeutic modality to reduce stress and pain while promoting comfort, relaxation, and well being.

Ruffin (2011) J Holist Nurs
Limitations

- Convenience sample of nursing students was not a representative sample.
- Most of the nursing students who volunteered had previously experienced massage.
- Only one therapist (unrepresentative of the massage therapist demographic) administered massage.
Recommendations for Future Research

- Use a sample of nursing students with a wide range of experience/attitude to massage
- Use a variety of therapists of same/opposite sex to administer massage
- Compare nursing students who have massage incorporated in their nursing curriculum for self/patient care to students who do not as to their attitude to touch for comfort care and their respective states of well being.
This Research Study Was Supported by a Grant from Sigma Theta Tau International: Tau Chapter

Georgetown University