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"To examine the effect of therapeutic touch (TT) on the pain and fatigue of the cancer patients undergoing chemotherapy, a randomized and three- groups experimental study-experimental (TT), placebo (placebo TT) and control (usual care) – was carried out…The TT(significant) was more effective in decreasing pain and fatigue of the cancer patients undergoing chemotherapy than the usual care group, while the placebo group indicated a decreasing trend in pain and fatigue scores compared with the usual care group”(375).


"Compared with those who received usual care, participants who received TT had significantly lower level of pain, lower cortisol level, and higher NKC [natural killer cells] level. Evidence supports TT as a beneficial intervention with patients. Future research on TT is still needed to learn more about how it functions. However, there is evidence to support incorporating TT into nursing practice” (193).


“This qualitative research study was conducted to describe the nature of the core process of TT in adults, and full term infants as practiced by five professional nurses, each treating one adult and one infant. Analysis of data obtained from interviews and focused participant observations was conducted. Findings provide empirical data to depict an overall process divided into three phases: (a) preparation, (b) treatment, and (c) termination, that adheres to the standard process as described by Krieger. It expands on the description of each phase, including two new subcomponents, orienting and disengagement, not previously seen in the literature. Lastly, the study describes the modification of the TT process with infants compared to adults” (17).


‘Touch is considered a core aspect of care provision and therapeutic relationships. Therapeutic touch allows nurses to facilitate healing and forge therapeutic relationship through touch or non-touch and maintain channels of communication often lost in dementia as the disease progresses”(27).


An experimental study performed in the Neonatal Intensive Care Unit of the Virgen Macarena University Hospital in Seville (Spain). Seventy eight premature neonates were randomly assigned to one of the comparison groups (39 in the control group and 39 in the experimental group). The outcome variables of weight, length of hospital stay, the presence of complications, and parental satisfaction were evaluated. Control variables related to maternal socio-demographic and clinic characteristics were also measured. The intervention was based on the application of Therapeutic Touch. The application of Therapeutic Touch reduces the length of hospital stay and the presence of complications. Nevertheless, further research in larger samples is required.
To determine whether Therapeutic Touch administered at the time of stereotactic core biopsy of suspicious breast lesions results in a reduction of patients’ anxiety and pain a randomized, patient-blinded, controlled trial of either Krieger-Kunz Therapeutic Touch or sham Therapeutic Touch was conducted. Participants were randomly assigned to either Therapeutic Touch or sham Therapeutic Touch. Changes in pain and anxiety were measured by visual analog scales immediately before and after stereotactic core biopsies. No significant differences were found between groups [Therapeutic Touch and sham Therapeutic Touch] on post biopsy pain, anxiety, fearfulness or physiological parameters.

To explore the extent to which Therapeutic Touch may be used to facilitate wellbeing and quality of life for residents in institutionalized settings using pre-test/post-test design involving residents in a care facility. The design sought to be as inclusive as possible in the context of a range of behavioral and physiological conditions. One hundred twenty-one pre-test/post-test reports were completed for analysis.

The results are consistent with previous studies indicting Therapeutic Touch assists in the alleviation of stress and anxiety in aged care residents, and increases the length and quality of their sleep. It also appears to moderately alleviate pain experienced from a range of conditions.

To control for the mind-body connection in studying complementary modalities, Dr. Gronowicz and her colleagues (see below Ankur Jhaveri, et al.) conducted experiments using osteoblasts, fibroblasts, and tenocytes in culture dishes. Jhaveri and his colleagues also used an osteosarcoma-derived cell line. The researchers chose the biofield therapy, Therapeutic Touch, for these experiments “…because it is a highly disciplined method, and requires extensive training to become an advanced practitioner” (233). “A specific pattern of TT treatment produced a significant increase in proliferation of fibroblasts, osteoblasts, and tenocytes in culture. Therefore, TT may affect normal cells by stimulating cell proliferation” (233).

“Narrative inquiry and qualitative descriptive methods were used to discover knowledge about how TT is used with preterm infants…The description that emerged from the practitioners’ narratives of the TT treatment process for preterm infants provides preliminary data for the systematic use and evaluation of TT as an adjunct to facilitating preterm infants’ physiological, behavioral, energy field development and well-being” (249).

“This study provided preliminary evidence for the potential of TT in dealing with agitated behaviors by people with dementia. Researchers and practitioners must consider a broad array of strategies to deal with these behaviors. TT may be an important intervention that is not costly, can be implemented by family or staff and may prevent or delay the use of pharmacotherapy and other strategies that may decrease the quality of life of the resident” ( 432).

“Therapeutic Touch appears to increase human osteoblast DNA synthesis, differentiation and mineralization, and decrease differentiation and mineralization in a human osteosarcoma-derived cell line” (1541).


To examine the outcomes of Therapeutic Touch™ with complications from chemical dependency during pregnancy fifty-four hospitalized pregnant women were randomly assigned to three treatments: seven days of Therapeutic Touch of twenty minutes, seven days of twenty minutes of a shared activity with a registered nurse, and standard ward care for seven days. Anxiety was measured using Speinberger’s State-Trait Anxiety Inventory. Withdrawal symptoms were measured using a standardized Symptom Checklist. Anxiety scores were significantly less on Days 1, 2, 3 for the group receiving Therapeutic Touch. There were no significant findings related to withdrawal symptoms measured on the Symptom Checklist. The authors conclude Therapeutic Touch may be of value as an adjunctive measure in the treatment of chemical dependency among pregnant women.


“The study is conceptualized within Rogers’s conceptual model of unitary human beings. The purpose of this pilot study was to determine whether Therapeutic touch (TT) can be effectively used in the operative setting and whether it could produce positive outcomes in the period from cerebral angiography to discharge…. The efficacy of TT on blood pressure, respirations, and pulse of the experimental groups was not statistically significant. The reasons for this finding are explored, and suggestions are made for future research” 168).

Marta, Ilda, Sueli Baldan, Ani Berton, Michele Pavam, Maria da Silva. “The effectiveness of Therapeutic Touch on pain, depression and sleep in patients with chronic pain: clinical trial”. Rev Esc Enferm da USP 2010; 44(4):1094-1100. http://www.ncbi.nlm.nih.gov/pubmed/21337796. The Therapeutic Touch was effective to decrease the intensity of pain and depression symptoms, as well as to improve sleep quality in the study sample. The results suggest that, as a complementary and noninvasive treatment mode, Therapeutic Touch can benefit elderly people with chronic pain, depressive symptoms and attitudes and bad sleep quality.


“Findings: Seven studies conducted between 1999 and 2004 were found and only five of the seven were included as pertinent evidence to answer whether Therapeutic Touch could significantly reduce pain revealed a majority of statistically significant positive results for implementing this intervention. Conclusion: Because there are no identified risks to Therapeutic Touch as a pain relief measure, it is safe to recommend despite the limitations of current research. Implications: Therapeutic Touch should be considered among the many possible nursing interventions for the treatment of pain” (85).


Data of their experience of being in a Therapeutic Touch practice group was gathered from members of practice groups in British Columbia or Ontario using a qualitative descriptive -exploratory method. Data were analyzed using an extraction-synthesis process. The findings expand on the positive aspects of participating in practice group. Awareness too of a comfort/discomfort dichotomy will prove useful to leaders and members.

The authors examine the research design and approaches which led to the significant outcomes of Therapeutic Touch on cells. The Therapeutic Touch practitioners passed a test to determine their abilities to offer the modality, they kept a journal, and only early passage cells were used to maintain a stable cell phenotype. Standard protocols in each experiment were used when offering Therapeutic Touch, placebo controls and untreated controls. The authors encourage well designed research to learn more about the human biofield.


“Significant changes of both variables in TT [Therapeutic Touch] and MT [Mimic Therapeutic Touch] groups suggest that more careful precision might be needed while selecting individuals as sham therapies in further experiments (p 41) …There were no significant changes in the control group (44).

Background: In the article the two people offering MT “admitted that their thoughts had strayed at times from the task of counting backwards from 1,000” and one said she felt “severely sinful” mimicking TT (46).


The demarcation problem i.e., the boundary between science and non-science is examined from the perspective of four philosophers, Popper, Kuhn, Lakatos and Feyerabend. Their positions are used to examine the scientific basis of Therapeutic Touch™ theory. The authors conclude that the positions of four philosophers all have strengths and weaknesses. Therapeutic Touch is either pseudoscientific [Popper] provisionally pseudoscientific but capable of future development [Lakatos] pre -scientific [Kuhn] or scientific [Feyerabend]. Imposing a single rule of method can impede progress hence a pragmatic scientific approach is encouraged.


“Findings in this study indicate that therapeutic touch applied twice a week for eight weeks decreases pain and stiffness of osteoarthritis in the knee. Therapeutic touch does not appear to affect range of motion or stability of the knee as indicated by the examination results of the KSS [Knee Society Score]” (2-3)

http://jhn.sagepub.com/content/25/4/217.short?rss=1&ssource=mfc

“Roger’s Science of Unitary Human Beings framed this study of pandimensional pattern changes in healers and healees paired for an 8-week series of Therapeutic touch (TT) sessions. Comparison of healee patterns before and after 141 TT sessions supported the hypotheses that healees would manifest decreased pulse and blood pressure, and reduced pain and stress (p <.05). Duration of TT sessions was not preset but determined by healers according to energy cues. TT time was not related to pattern changes, consistent with the clinical practice of TT and the atemporal nature of Rogers’s conceptual framework. Healers and healees showed parallel changes after the TT series” (217)


“TT is a safe and beneficial intervention for cancer patients that can be integrated within a conventional setting, providing that the program evolves with changing patient and organizational needs. Lessons
gleaned include (1) positioning TT within the context of research and evidence-based practice, (2) developing and adhering to standards of practice and professional, and (3) maintaining a nonpartisan attitude and communicating a plausible rational” (993).


To study outcomes of Therapeutic Touch the folding of ribonuclease A, a controlled energy-requiring system, was measured. To assess the enzyme-folding, a kinetic assay and fluorescence spectroscopy were used. By utilizing an enzyme model that responds to changes in physically defined energy states, this work assumes that Therapeutic Touch affects conventional energy that obeys physical laws of science. Therapeutic Touch, offered by one practitioner, was performed with hand 2-4 inches from the dialysis bags in 100mL of buffer for seven minutes. The bags were then transferred to 300mL of buffer and dialyzed for spontaneous renaturation. As a control, partially renatured solutions were allowed to slowly, spontaneously renature after removal of the urea through dialysis in buffer. Measures of structure and function, a kinetic assay and florescence spectra, respectively were performed to indirectly test the energy state at each step. Data suggest that the kinetic assay is a useful means of assessing the degree of refolding, and specifically, the enzyme function. In this study, fluorescence spectroscopy was not shown to be an effective measurement of enzyme structure. While more research is needed, an enzyme-folding model may provide a useful means of studying the energy exchange in Therapeutic Touch.


http://journals.lww.com/advancesinneonatalcare/Abstract/2008/12000/A_Double_Blind_Randomized_Controlled_Pilot_Trial.13.aspx

“In this pilot trial, HPV [Heart Period Variability] showed an increase for the TT group compared with the NTT [Non-TT] group. The study reveals no adverse effects of TT in preterm infants” (2).

Background: Prior research indicated that “As a comfort strategy, touch does not hold the same pleasure for infants less than 32 weeks’ gestation. These infants are not as neurophysiologically prepared to integrate and organize behavior as their older counterparts. Negative behavioral response to touch and handling may range from startle reflex and agitation to blood pressure, heart rate, oxygen desaturation respiratory and endocrinal changes. Research suggests that these infants are more physiologically fragile and may not be able to tolerate such comfort strategies. A complementary therapy, such as therapeutic touch (TT), that does not require physical touch presents a potential approach to the dilemma of comfort and stress reduction in the extremely premature infant” (2).


“This study supports the use of therapeutic touch as a preventive intervention that when administered twice daily to persons with ADRD [Alzheimer's disease or a related dementia] at risk for disruptive vocalization, can decrease the probability of this behavior” (131).


http://www.informaworld.com/smpp/content~db=all?content=10.1080/13607860410001649635

“Therapeutic touch offers a nonpharmacological, clinically relevant modality that could be used to decrease behavioral symptoms of dementia, specifically manual manipulation (restlessness) and vocalization, two prevalent behaviors” (66).
To investigate the outcomes of Therapeutic Touch (TT) on anxiety, vital signs and cardiac dysrhythmia in women undergoing cardiac catheterization. Therapeutic Touch significantly decreased state anxiety but not trait anxiety, decreased the incidence of all cardiac dysrhythmias except premature ventricular contraction, and regulated vital signs in the intervention group versus placebo and control groups. Therapeutic Touch is an effective approach for managing state anxiety, regulating vital signs, and decreasing the incidence of cardiac dysrhythmia during stressful situations such as cardiac catheterization.

Other Articles of Interest 2004-2009
"Studies overall are of medium quality, and generally meet minimum standards for validity of inferences. Biofield therapies [Reiki, therapeutic touch and healing touch] show strong evidence for reducing pain intensity in pain populations, and moderate evidence for reducing pain intensity in hospitalized and cancer populations. There is moderate evidence for decreasing negative behavior symptoms in dementia and moderate evidence for decreasing anxiety for hospitalized population. There is equivocal evidence for biofield therapies’ effects on fatigue and quality of life for cancer patients as well as for comprehensive pain outcomes and affect in pain patients , and for decreasing anxiety in cardiovascular patients" (np).

This article is included because of the importance of intention in Therapeutic Touch. "Intention is central to the concept of voluntary action. Using functional magnetic resonance imaging, we compared conditions in which participants made self-paced actions and attended either to their intention to move or the actually movement. When they attended to their intention rather than their movement, there was an enhancement of activity in the pre-supplementary motor area (pre-SMA). We also found activation in the right dorsal prefrontal cortex and left intraparietal cortex. Prefrontal activity but not parietal activity was more strongly coupled with activity in the pre-SMA. We conclude that activity in the pre-SMA reflects the representation of intention" (1208).

Article published in 2003 which includes the use of the Patient Satisfaction Survey and TT Performance Improvement Tool. These two instruments could be useful when conducting research/continuous quality improvement on the use of Therapeutic Touch.
"Representing the largest published sample size of therapeutic touch (TT) outcome to date, data from this continuous quality improvement (CQI) clinical study suggests that TT, when provided in the clinical setting promotes comfort, calmness, and well-being among hospitalized patients. In addition, patients are highly satisfied with TT. The newly developed Patient Satisfaction Survey and TT Performance Improvement Tool provide an effective means by which to evaluate a TT program" (189).

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