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

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Background: While massage has been removed from nursing curricula, studies have reported massage as safe and effective for stress reduction, relaxation, pain relief, fatigue, and quality of life.

Objective: To compare the efficacy of two intensities of touch administered during two seated massages on the attitudes of nursing students toward touch for their self-care and patient care.

Participants: Nursing students who volunteered gave institutional review board–approved written informed consent to undergo massage by a licensed massage therapist.

Settings/location: A private room adjacent to the nursing lab in a school of nursing.

Intervention: Brief seated massages of differing intensities. Each participant received low-intensity and high-intensity touch in a two-block, randomized order, within-subjects design. Linear mixed models nested within subject and random intercept analyses were used to test hypotheses in this two-treatment, two-sequence, two-period crossover design.

Outcome measures: Health questionnaires/visual analogue scales pertaining to physical/affective/and attitudinal status were completed before and after each massage.

Results: Twenty-nine participants (93% female, 83% single) completed the study. Before massage, the optimal intensity of touch anticipated for self-comfort was 6.6 (0=no pressure;10=most intense pressure imaginable). The mean touch intensities were 6.7 for high-intensity massage and 0.5 for low-intensity ($p<0.001$). The overall percentage differences (feeling better or worse) following massage were as follows: low intensity, 37.5% better; high intensity, 62.7% better ($p<0.001$). Significantly more improvement was reported for energy, pain, stress, and feeling physically uptight after high-intensity compared with low-intensity ($p<0.03$). Participants were more likely to both receive touch for self-care and provide touch for patient care after experiencing high- versus low-intensity massage ($p<0.01$).

Conclusions: High-intensity seated massage was more efficacious than low-intensity massage and positively influenced nursing student attitudes toward the inclusion of massage in self-care/patient care. The role of touch for self-care/patient care in the nursing curricula merits reconsideration.

Introduction

THE POPULARITY OF COMPLEMENTARY and alternative medicine (CAM) in the United States is well documented.¹ CAM is used by an estimated 40% of the adult population² at an annual out-of-pocket cost of \$33.9 billion.³ Chronic diseases account for most health care utilization and expenditures in middle-aged and older populations, with joint and back pain–related conditions being among the most prevalent.⁴ The prevalence of chronic pain reported in the United States is 30.7%, and the prevalence is higher in women and among persons of advancing age.⁵ Sixty percent¹ to 75%³ of CAM expenditures are for manipulative or body-based therapies, including massage. Massage was the CAM

therapy used by the highest proportion of adults to treat functional limitation (53.4%); most used massage to treat back/neck pain, followed by arthritis/rheumatism.⁶ On the basis of a systematic review of nonpharmacologic therapies for treatment of chronic back pain, the American Pain Society and American College of Physicians jointly recommended in a practice guideline that clinicians consider several CAM therapies, including massage, for patients who don't respond to self-care options.^{7,8} The Society for Integrative Oncology also recommended massage as part of a multimodality treatment regimen in patients with cancer experiencing anxiety or pain.⁹ Similarly evidence-based practice guidelines in oncology have recommended massage for relief of pain and anxiety.^{9,10} Clinical acceptance of massage for these

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indications in practice guidelines is believed to account for the large increase (55.7%) in massage use observed from 2002 to 2007.¹¹

Current nursing practice requires adequate knowledge of CAM to meet this growing consumer demand.¹² To this end, the National Council Licensure Examination for Registered Nurses requires students to assess, integrate, incorporate, apply, and evaluate CAM (including massage) as part of the knowledge, skills, and abilities that are essential to the nurse to meet client needs for promotion, maintenance, or restoration of health.¹³ One approach to facilitating familiarity of CAM therapies and practices is to provide CAM experiences in the nursing curriculum.¹⁴ In this regard, stress and burnout have been identified as occupational hazards for nurses, and the need for workplace health-promoting behaviors¹⁵ provides an opportunity to expose nursing students to CAM practices. The 2011 American Nurses Association Health and Safety Survey reported that the top concerns of the nurses surveyed are acute or chronic effects of stress and overwork (74%) and disabling musculoskeletal injuries (62%).¹⁶ Nearly all of the more than 4000 nurses surveyed reported job related neck, back, or shoulder pain, and 80% indicated it was a frequent problem.¹⁷ A brief, seated massage has been reported to reduce pain and muscle tension¹⁸ in nurses and can be incorporated as a component of a wellness program to promote self-care in nurses.^{15,19} The high prevalence reported for occupationally related pain in nursing paired with the stress experienced by nursing students²⁰ provided an opportunity to study a brief seated massage as a CAM intervention during the nursing semester.^{21–23}

Materials and Methods

Design and sample

The institutional review board approved this study. Twenty-nine volunteer nursing students provided written informed consent to undergo two 15-minute seated massages in the same session by a licensed massage therapist. Each participant was stratified as an undergraduate or second-degree student. Participants within stratified blocks were randomly assigned to receive both low- and high-dose intensity touch in a two-block, randomized order, within-subjects design.

Questionnaires were completed before and after each massage, with a 15-minute interval between massages. Before each seated massage, participants completed questionnaires that included a question about optimum pressure: “As a recipient of touch for your own comfort care, what is the anticipated intensity of pressure that is optimal for your comfort?” (0=no pressure, 10=most intense pressure imaginable). After each seated massage, participants placed a mark on the Visual Analogue Scale (VAS), which ranged from 0 to 10 on a 100-mm horizontal line, for the following variables: touch intensity (“As a recipient of touch during this massage, what was the intensity of pressure you experienced?” [0=no pressure, 10=most intense pressure imaginable]) and assessed effect (“What overall percent difference did the massage make in how you feel (0–100%)? Better or worse?”).

Before and after each massage, VASs pertaining to physical/affective/attitudinal status were completed. Participants placed a mark on the VAS from –10 to 10 on a 200-mm horizontal line for the following dimensions: energy (–10=most listless/

apathetic imaginable, 10=most energized/engaged imaginable); irritability (–10=most angry/irritated imaginable, 10=most peaceful/serene imaginable); mental clarity (–10=most confused/bewildered imaginable, 10=most mentally clear/focused imaginable); mood (–10=most depressed/sad imaginable, 10=most joyful/happy imaginable); pain (–10=most painful, sore imaginable, 10=most painless, physically comfortable imaginable); self-efficacy—“feeling self-confident/empowered to face and successfully carry out important tasks I need to accomplish” (–10=totally unconfident/incapable, 10=totally confident/capable); stress—“feeling emotionally stressed” (–10=most emotionally stressed imaginable, 10=most emotionally relaxed imaginable); uptightness—“feeling uptight physically” (–10=most physically uptight imaginable, 10=most physically relaxed imaginable); likelihood of receiving and providing touch—“Does your experience with massage today make you more or less likely to receive massage for self care in the future?” (–10=much less likely, 10=much more likely) and “Does your experience with massage today make you more or less likely to be a provider of massage for comfort care of others in the future?” (–10=much less likely, 10=much more likely).

Intervention

Participants gave written informed consent and completed questionnaires in a private room within the clinical simulation center located in a school of nursing. Before each seated-massage session, lighting was dimmed to reduce glare and background music was played (“Body & Soul,” Wellness Music, St. Clair Entertainment Group Inc., Montreal, Quebec, Canada). Participants were seated in a professional massage chair (Portal Pro; Oakworks Inc., New Freedom, PA). The written informed consent form described the intervention as follows:

You will be clothed, but uncovered surfaces, such as hands, wrists, forearms, neck, and scalp, as well as covered areas, may be massaged with your permission. The massage will last 15 minutes and include a variety of strokes such as glides over the surface, compression of tissue, tapping, vibration, gentle stretching, and kneading of tissue. The therapist may use fingers, palms, knuckles, soft fist, fist, forearms and elbows to contact your tissue. You will be asked to provide frequent feedback as to whether the intensity of pressure is comfortable. ... In order to determine the effect of the intensity of touch in your massage on your responses, you will be randomly assigned to receive a 15 minute “low dose” touch massage where the touch intensity will be barely perceptible/imperceptible to be followed in the same session by a 15 minute “high dose” touch massage based on your level of comfort or vice versa.

The seated massage consisted sequentially of effleurage/glides from lumbosacral to cervicothoracic region followed by compressions/petrissage over the upper back/shoulder girdle. Effleurage/glides from shoulder to wrist were followed by upper-extremity compressions/petrissage/kneading followed by spreading of palm/hand with compressions over thenar and hypothenar eminences and myofascial stretching of digits. Tapotement—which progressed from wrist over the upper extremities to shoulders and upper back, then down the posterior thorax to the lumbosacral region, and then superiorly to cervicothoracic region—were followed by finger glides over posterior cervical muscles with compressions at

TABLE 1. DEMOGRAPHIC CHARACTERISTICS OF THE PARTICIPANTS (N=29)

Characteristic	Value
Age (y)	26.68 ± 6.97
Women	27 (93.1)
Marital status: single	24 (82.8)
Race	
White	24 (82.8)
African American	3 (10.3)
Asian	1 (3.4)
Hispanic	1 (3.4)
Nursing program	
Undergraduate	11 (37.9)
Second degree	18 (62.1)
Experience with massage	21 (72.4)

Values expressed with a plus/minus are the mean ± standard deviation; all others are number (percentage) of participants.

their occipital and suboccipital attachments. Scalp compressions/petrissage completed the seated massage with full palmar still touch over the scalp as the final touch.

Operationally, the low-dose touch was administered by barely contacting the surface and/or stopping at the first perception of body heat. The high-dose touch was administered by gradually sinking from superficial to deeper layers until the deep fascia was contacted, with frequent checking in to assess the participant's comfort in order to moderate pressure accordingly.

Statistical and data analysis

Linear mixed models with measures nested within subjects and random intercepts were used to test hypotheses in this two-treatment, two-sequence, two-period crossover design controlling for initial levels. Baseline levels of each outcome and the interaction of baseline with treatment (touch intensity dose) were predictors in the models in addition to treatment, sequence (low-dose or high-dose first),

FIG. 1. Optimum massage touch intensity rating before massage and perceived touch intensity during low-intensity ($n=29$) and high-intensity ($n=28$) intensity massage. Error bars are $\pm$ SEM.

FIG. 2. Feeling better (percentage improvement) after high-intensity ($n=28$) and low-intensity ($n=29$) intensity massage. Error bars are $\pm$ SEM.

and period (first or second massage). The data were analyzed using SPSS Statistics for Windows Version 19.0 (IBM Corp., Armonk, NY). Analyses were based on intent to treat. One participant completed only the first massage due to her class schedule; her data were included in the analyses.

Results

Demographic data for the participants studied are presented in Table 1. Most participants were female and white.

FIG. 3. Difference in percentage improvement in physical/affective/attitudinal dimensions after low-intensity ($n=29$) and high-intensity ($n=28$) massage. Higher bars represent greater improvement in high intensity massage. Irritability was winsorized to achieve normality. Estimates of improvement in each dimension are based on linear mixed models with random intercepts, including predictors of treatment (low- or high-intensity massage), sequence of treatment (low- or high-intensity massage first), baseline value of the outcome dimension, period (first or second exposure to massage), and the interaction between baseline and treatment (see Table 2). * $p < .05$. Error bars are $\pm$ SEM.

TABLE 2. FIXED-EFFECTS RESULTS FROM LINEAR MIXED MODELS WITH RANDOM INTERCEPTS TO EXAMINE CONTRIBUTIONS OF SEQUENCE OF TREATMENT (LOW- OR HIGH-INTENSITY MESSAGE FIRST), TREATMENT (LOW- OR HIGH-INTENSITY MESSAGE), PERIOD (FIRST OR SECOND MESSAGE EXPERIENCE), AND INITIAL ASSESSMENT OF OUTCOME TO CHANGES IN PHYSICAL/AFFECTIVE/ATTITUDINAL DIMENSIONS DURING SEATED MESSAGE

<i>Predictor per dimension</i>	<i>Estimate</i>	<i>Standard error</i>	<i>df</i>	<i>t</i>	<i>p-Value</i>	<i>95% Confidence Interval</i>	
						<i>Lower bound</i>	<i>Upper bound</i>
Energy							
Intercept	2.674753	0.653638	44.126	4.092	0.000	1.357539	3.991966
Sequence	0.502410	0.614089	23.535	0.818	0.421	-0.766335	1.771154
Treatment	-1.345519	0.581830	24.603	-2.313	0.029	-2.544802	-0.146236
Period	-0.016537	0.378875	28.925	-0.044	0.965	-0.791511	0.758437
Pre-massage energy	-0.483455	0.113038	33.043	-4.277	0.000	-0.713421	-0.253489
Treatment×premessage energy	-0.025494	0.142064	23.564	-0.179	0.859	-0.318987	0.268000
Irritability							
Intercept	3.756724	1.024804	42.276	3.666	0.001	1.688984	5.824463
Sequence	-1.496503	0.898696	25.876	-1.665	0.108	-3.344228	0.351222
Treatment	0.723152	1.007373	25.858	0.718	0.479	-1.348087	2.794391
Period	-0.613848	0.588552	24.510	-1.043	0.307	-1.827224	0.599528
Premassage irritability	-0.471788	0.151481	40.101	-3.114	0.003	-0.777919	-0.165657
Treatment×premessage irritability	-0.218440	0.183953	27.317	-1.187	0.245	-0.595676	0.158796
Mental clarity							
Intercept	2.097312	0.806067	45.974	2.602	0.012	0.474759	3.719864
Sequence	0.856589	0.571305	24.080	1.499	0.147	-0.322320	2.035499
Treatment	-0.152301	0.760255	25.874	-0.200	0.843	-1.715399	1.410796
Period	0.174026	0.361273	22.738	0.482	0.635	-0.573800	0.921853
Premassage mental clarity	-0.332293	0.138197	45.488	-2.404	0.020	-0.610554	-0.054032
Treatment×premessage mental clarity	-0.117792	0.151576	26.323	-0.777	0.444	-0.429176	0.193591
Mood							
Intercept	2.193346	0.657050	44.822	3.338	0.002	0.869833	3.516859
Sequence	0.137567	0.577965	24.482	0.238	0.814	-1.054052	1.329185
Treatment	-0.813238	0.620926	25.138	-1.310	0.202	-2.091702	0.465227
Period	-0.173679	0.328466	23.707	-0.529	0.602	-0.852044	0.504687
Premassage mood	-0.296490	0.104421	47.585	-2.839	0.007	-0.506489	-0.086491
Treatment×premessage mood	-0.119418	0.127595	24.571	-0.936	0.358	-0.382438	0.143602
Pain							
Intercept	3.747703	0.719410	37.968	5.209	0.000	2.291293	5.204114
Sequence	-0.584582	0.850806	25.194	-0.687	0.498	-2.336166	1.167001
Treatment	-2.426169	0.547156	27.137	-4.434	0.000	-3.548575	-1.303762
Period	0.750502	0.486471	25.008	1.543	0.135	-0.251387	1.752391
Premassage pain	-0.522995	0.088435	38.505	-5.914	0.000	-0.701945	-0.344045
Treatment×premessage pain	0.262847	0.116092	26.891	2.264	0.032	0.024601	0.501093
Self-efficacy							
Intercept	2.366608	0.721464	44.313	3.280	0.002	0.912882	3.820333
Sequence	0.156375	0.555555	23.564	0.281	0.781	-0.991356	1.304105
Treatment	-1.171121	0.672874	22.939	-1.740	0.095	-2.563271	0.221029
Period	-0.294828	0.302312	21.984	-0.975	0.340	-0.921812	0.332155
Premassage self-efficacy	-0.354655	0.121837	47.937	-2.911	0.005	-0.599634	-0.109677
Treatment×premessage self-efficacy	0.089434	0.129283	23.032	0.692	0.496	-0.177988	0.356855
Stress							
Intercept	5.456578	0.848942	38.225	6.428	0.000	3.738316	7.174840
Sequence	-1.174604	1.030475	26.642	-1.140	0.264	-3.290293	0.941084
Treatment	-1.766134	0.505470	24.444	-3.494	0.002	-2.808370	-0.723897
Period	0.268552	0.537562	29.421	0.500	0.621	-0.830201	1.367306
Premassage stress	-1.040617	0.125064	43.806	-8.321	0.000	-1.292698	-0.788536
Treatment×premessage stress	0.168671	0.131066	25.241	1.287	0.210	-0.101134	0.438475
Uptightness							
Intercept	5.897941	1.118500	41.747	5.273	0.000	3.640312	8.155570
Sequence	-1.442728	1.365871	30.391	-1.056	0.299	-4.230703	1.345246
Treatment	-2.298624	0.639201	26.385	-3.596	0.001	-3.611590	-0.985659
Period	0.196904	0.674402	28.909	0.292	0.772	-1.182593	1.576400
Premassage uptight	-1.024447	0.125952	35.332	-8.134	0.000	-1.280057	-0.768838
Treatment×premessage uptight	0.147671	0.169683	27.338	0.870	0.392	-0.200288	0.495631

Separate analyses were conducted for each dimension outcome. Outcome variables were differences from pre- to postmessage, with each dimension measured on a scale of -10 to 10 both pre- and postmessage, with -10 being the worst possible and 10 being the best possible score on each dimension. Reference groups are high-intensity message first for sequence, high-intensity message for treatment, and second message for period. Irritability is winsorized for normality.

FIG. 4. Likelihood of being a recipient of touch for self-care and of being a provider of touch for patient care assessed after receiving low-intensity ($n=29$) and high-intensity ($n=28$) massage. Error bars are $\pm$ SEM.

The touch intensities experienced by participants in the high- and low-dose seated massage conditions are presented in Figure 1, along with the optimum intensity of touch anticipated by the participants for their comfort. The high dose was significantly more intense than the low dose ($t[27]=20.533$; $p<0.001$) and very similar to the optimum intensity reported by participants at baseline. The low-intensity dose was significantly different from zero (0=no pressure) ($t[28]=6.046$; $p<0.001$).

The percentage difference in how participants felt after the high- and low-dose touch intensity massages are presented in Figure 2. Participants reported feeling significantly better (62.7%) following the high-dose massage than after the low-dose massage (37.5% better) ($t[27]=-4.446$; $p<0.001$). The improvement of 37.5% for the low dose was significantly different from zero ($t[28]=5.40$; $p<0.001$). The percentage improvement for each of the physical and affective dimensions measured from VAS scores are presented in Figure 3. A summary of the linear mixed models used to examine the significance of the difference in improvement between high- and low-dose intensity massages are included in Table 2. Significantly greater improvements were seen in energy ($p<0.03$), pain ($p<0.001$), stress ($p=0.002$), and feeling physically uptight ($p=0.001$) following the high-dose massage compared with the low-dose massage. Significant improvements were not seen for irritability ($p=0.479$), mental clarity ($p=0.843$), mood ($p=0.202$), and self-efficacy ($p=0.095$). The likelihood of being a recipient of touch for self-care and of being a provider of touch for patient comfort care is presented in Figure 4. After the high-dose massage, participants were significantly more likely to be a provider of touch for patient comfort care ($t[27]=2.241$; $p=0.003$) and a recipient of touch for self-care ($t[27]=3.796$; $p<0.001$) than after the low dose.

Discussion

Brief seated massage administered to nurses in the workplace has been reported to be of benefit. A randomized controlled trial (RCT) involving a 15-minute seated massage administered to nurses in the workplace reported significantly reduced pain and muscular tension.¹⁸ A controlled

trial of a 10-minute seated massage administered to nurses in the workplace reported significantly reduced perceived stress.²⁴ This study confirms these prior observations.

Similarly, uncontrolled studies of a 15-minute seated massage administered to nurses in the workplace have also reported significant improvements in stress and anxiety-related symptoms,²⁵ pain and mood,²⁶ and anxiety following a 15-minute weekly back massage.²⁷

An RCT of a 20-minute seated massage in patients withdrawing from psychoactive drugs found significant reduction in anxiety.²⁸ A nonrandomized controlled study of a 20-minute seated massage in young adult psychiatric inpatients found significantly reduced self-reported anxiety and resting heart rate.²⁹

A larger literature reports benefits following full-body massage in a variety of patient populations and conditions: RCTs of full-body massage in patients report significantly decreased pain and improved function in patients with chronic low back pain;³⁰ significantly reduced pain, anxiety, and tension in postoperative cardiac patients;³¹ significantly increased heart rate variability and improved mood in breast cancer survivors with cancer-related fatigue;³² significantly reduced pain, increased muscle relaxation, and improved mood in hospice inpatients with metastatic bone pain;³³ significantly reduced depression in patients with breast cancer;³⁴ significantly decreased physical discomfort and fatigue³⁵ and perceived stress in breast cancer patients.³⁶ Significantly reduced pain and anxiety in patients with chronic nonmalignant pain following nurse-administered 15-minute back massage has been reported.³⁷

With respect to the musculoskeletal system, massage is reported to decrease muscle hardness and muscle stiffness in patients with myofascial pain syndrome,³⁸ to increase range of motion at the hip following massage at the musculotendinous junction of the hamstrings,³⁹ and to decrease episiotomy rates and shorten duration of delivery following massage of the perineum during the second stage of delivery.⁴⁰

The effect of differential intensities of touch has also been studied. Higher-intensity touch has been reported to significantly elevate skin temperatures over the massaged, adjacent, and dermatomal areas following massage;⁴¹ increase range of motion, decrease electromyographic activity during maximal voluntary isometric contraction, and decrease alpha motor neuron central nervous system excitability;⁴² increase heart rate variability;^{43,44} reduce inflammatory cytokines in exercise-induced muscle damage while augmenting mitochondrial biogenesis;⁴⁵ increase the mean force required to elicit subjective levels of pressure following a graded increase in the intensity of massage;⁴⁶ decrease stretch pain in patients with delayed-onset muscle soreness;⁴⁷ and increase heart rate variability and decrease fatigue following massage of lower-limb muscles in patients who reported fatigue and discomfort following occupationally related standing.⁴⁸ These findings are consistent with the observations reported in this study of the greater efficacy of high-intensity touch compared with low-intensity touch on the physical and affective dimensions measured.

The study used only one massage therapist, who was of the opposite sex; this raises the question whether the efficacy of the massage intervention would differ according to the sex of the therapist and whether nursing students providing touch to patients of the same or opposite sex would

have been differentially influenced by having been a recipient of massage from a therapist of the same or opposite sex. In this study, female participants only received massage from an opposite-sex therapist. Nonetheless, participants reported themselves to be significantly more likely to be a recipient of massage for self-care as well as a provider of touch for patient care following the high-intensity dose massage. The efficacy and likelihood of nurses administering touch for comfort care to same and opposite-sex patients are important in nursing care/education and needs to be studied further.

Limitations

Limitations of this research design are also attributable to the small convenience sample of nursing students who volunteered rather than a random sample of all students. In addition, a high percentage of participants had received a prior massage, suggesting that they had an expectation of or had previously experienced benefit following massage. Expectation of benefit in the therapeutic relationship has been shown to activate areas of the brain associated with reward/placebo response in both providers and recipients of a therapeutic intervention/interaction.⁴⁹ One aspect of the therapeutic relationship is the therapeutic milieu. In this study the therapeutic milieu in which massage was administered (private room; subdued lighting during massage; soft, relaxing music; comfortable massage chair with cushioned face rest) is likely to have contributed to the beneficial effect of the therapeutic intervention/interaction but is not generalizable to the usual nursing healthcare setting.

How much of the benefit observed may be attributable to the therapeutic milieu alone cannot be ascertained in this study because a “no-touch” intervention was not included as a control. In this respect, a recent study⁵⁰ using a no-touch control intervention in comparison with a full-body massage that administered a light-touch pressure (mean of 2.1, where 1=lightest and 5=deepest) reported no significant difference between the interventions for pain, anxiety, and alertness when adjusted for baseline differences.

In drug studies that use placebo and sham interventions in which patient expectation of benefit was very high, placebo responses of 45%–46% have been observed.⁵¹ Even this high placebo response is significantly less than the 62.7% overall improvement in feeling better that was observed following the high-dose massage administered in this study ($z = 1.864$, one tailed $p < 0.03$).

One contributory influence on the beneficial response to massage is oxytocin. Oxytocin secretion has been reported to significantly increase after a 15-minute moderate-pressure back massage in association with a significant decrease in the stress hormone adrenocorticotrophic hormone.⁵² Oxytocin has also been shown to significantly enhance the analgesic placebo response to pain.⁵³

Conclusions

Massage, historically a component of hospital nurse training dating from Florence Nightingale, was progressively removed from nursing curricula with the development of physical medicine and physical therapy as billable hospital-based specialty disciplines.⁵⁴ Subsequently, because nursing has become more complex, technically challenging, and time consuming, what were once considered “basics” in

nursing bedside care, such as the backrub and the bed bath are also being left behind.⁵⁵ Nursing leaders, recognizing the power of interpersonal touch⁵⁶ as important to patients’ and their families’ expectations of nursing and as an embodiment of compassionate and caring nursing, have sought to reintegrate the administration of caring touch back into bedside nursing by incorporating the “basics” into a nursing-derived consensus-based “Patient Care Essentials” for nursing staff.⁵⁵ Research to assess the effect of specific nursing interventions within the nursing healthcare setting is needed to optimize patient outcomes and nursing practice.

This study demonstrates the beneficial effect experienced by nursing students of a brief seated massage administered with sufficient intensity on their positive attitudinal change to use this modality in patient and self-care. Future studies could be designed to train students in basic massage techniques and their application in the care of selected patients. The challenge of incorporating massage training into the nursing curriculum has been studied by using both peer-practiced experiential learning²² and active learning in which peer practiced learning was followed by therapeutic administration of the newly learned touch skill in the care of cognitively impaired geriatric patients.⁵⁷ In both studies the nursing students found the experience of receiving and providing the newly learned touch skill in the respective settings to be valuable both personally and professionally in enhancing positive patient outcomes. Gentle touch has also been found to be efficacious in significantly facilitating nutritional intake in cognitively impaired geriatric patients.⁵⁸ This finding raises the nursing research/education question of the optimal touch intensity to be administered in the different patient populations for which massage has been reported to be efficacious (e.g., cancer/chronic pain) as well as investigating efficacy of touch in other populations (e.g., patients and family members coping with end-of-life care⁵⁹ and hospitalized patients experiencing sleep disturbance⁶⁰).

Perceived stress in staff nurses is significantly inversely correlated with their overall health-promoting behaviors¹⁵ with outside caregiver responsibilities, further exacerbating this inverse correlation. Understanding that physical and emotional stress are important components of nursing burnout provides nurse educators an opportunity to integrate CAM modalities such as massage into nurse training/education⁶¹ as both a health promoting activity for self-care and an essential touch skill for effective bedside nursing care.

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Author Disclosure Statement

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