

Abstracts from the 2019 Research Poster Session at the American Massage Therapy Association Annual Convention

RECRUITING MASSAGE THERAPISTS AS RESEARCH PARTICIPANTS: CHALLENGES AND LESSONS LEARNED

Kelly M. Heslin, MPH, CHES, Lois J. Loescher, FAAN, PhD, Graciela E. Silva, MPH, PhD, Myra L. Muramoto, MPH, MD

Background: Massage therapists (MTs) historically have not been included as community partners to promote skin cancer risk reduction for the general population. The Massage Therapists Skin Health Awareness, Referral and Education (MTsSHARE) study addresses this oversight by providing MTs in Arizona with an online training focused on building the skills they need to assist with skin cancer risk reduction efforts.

Objective: Prior publications detail the utility of, and protocols for, recruiting MTs as research personnel. There is a gap in the literature describing recruitment of MTs as research participants. In this presentation we describe the challenges of recruiting MTs as research participants for the MTsSHARE study.

Methods: This study employed a variety of methods, approved by our institutional review board, to recruit MTs throughout Arizona. We contacted local MT leaders, who used their personal and professional social media networks to post recruitment messages. Study personnel posted inclusion criteria on personal social media, and reached out to known MTs, friends and family who interact with MTs. We regularly posted recruitment flyers at popular locations in Tucson and Phoenix (coffee shops, public message boards, etc.), and visited MT practices throughout several urban areas around the state to deliver recruitment materials. State and national MT organizations included recruitment ads in their online newsletters, and we reached out to Arizona massage schools to enlist their alumni networks. Finally, study personnel designed a postcard,

sending it to Arizona MTs registered with a national MT organization. In order to determine the success of the various methods, we maintained detailed recruitment and enrollment records, coding each participant who reached out for more information by how they learned of the study.

Results: Between July 1, 2018 and August 1, 2019, 210 MTs contacted study staff for more information. Of these, 140 (67%) underwent eligibility screening, and of those screened, 50 (36%) were deemed ineligible due to too few clients or too few years in practice. One hundred eligible MTs completed the study intake forms; 85 (85%) completed the baseline survey to enroll in the study, and of those 11 (13%) were lost to follow-up, leaving 74 active participants. The most successful recruitment strategy was the recruitment postcard, resulting in 130 MT contacts, or 62% of all interested.

Conclusions: MTs are valuable professionals to include in health promotion efforts, and are clearly interested in participating in continuing education; however, reaching the geographically diverse network of MTs throughout Arizona proved more difficult than anticipated. Our experience illustrates the difficulties faced in applying general recruitment strategies to new or previously unknown research populations. We learned the importance of applying a variety of recruitment strategies, and remaining flexible in order to implement advice and feedback solicited from MTs. Our experience indicates that, while online- and social media-focused recruitment efforts may be useful within other research populations of interest, physical mailers remain an effective method to recruit MTs. Future health promotion research will benefit from further conversations with MTs about how to more effectively recruit these professionals for participation.

BARRIERS TO ACCESS AND PERCEPTIONS OF MASSAGE THERAPY AMONG PATIENTS RECEIVING SERVICES AT A PUBLIC HOSPITAL SYSTEM IN NORTHEAST OHIO

Diane Mastnardo, BS, LMT, Jacqueline Dolata, MBA, Earl Pike, BA, John D. Thornton, MD

Introduction: Massage therapy is increasingly viewed as part of integrative health care which may be due to an expanding evidence base for treating common health complaints. Studies have shown massage to be effective with increasing functional outcomes in back pain, headaches, neck and shoulder pain, stress, anxiety, and alleviating symptoms of depression. A 2007 National Institute of Health (NIH) survey found that massage therapy had the greatest increase of use between 2002 and 2007. The growth was more pronounced among non-Hispanic whites than racial and ethnic minorities, and complementary and alternative (CAM) therapies become more likely when conventional care is restricted. A gap in knowledge exists in understanding the barriers to access and perceptions of massage. Knowing this could provide insight into appropriate use of massage in health care, especially for minorities and those of lower socioeconomic status who have not historically had access to massage.

Purpose: To understand barriers to access and perceptions of massage therapy use, and learn about interest for inclusion of massage therapy as a treatment modality for common health complaints in lower socioeconomic populations.

Methods: A descriptive cross-sectional anonymous survey adapted from the attitudes towards massage (ATOM) scale and client expectations of massage scale (CEMS), pilot tested by community members and approved through the MetroHealth IRB. Surveys administered in waiting rooms of urban and suburban health centers in a public health system via iPad to patients age 18–83 over an 11-week time period.

Results: 474 patients participated; 57% from urban locations, 40% white, 36% black. Age 18–83 equally distributed (18–69). Massage is seen as health care equal to luxury. Cost is overwhelmingly the largest barrier in both urban and suburban settings. Patients identified back pain, headaches, stress, and anxiety as the main reasons they would seek massage.

Conclusion: Understanding how the public perceives massage therapy and identifying the barriers to access may help develop viable options for those of lower socioeconomic status access to massage therapy, as cost was overwhelmingly seen as the largest barrier to access. Increasing understanding the potential benefits of massage therapy as part of health care, especially for back pain, headaches, stress, and anxiety, is necessary for inclusion as a treatment modality in health care. Limitations of the study include sample was limited to one hospital system in Northeast Ohio and to only English-speaking participants.

ADOLESCENTS' ATTITUDE AND PERCEPTION TOWARDS MASSAGE THERAPY: A CROSS-SECTIONAL STUDY

Donya Nemati, Samantha Zabel, Mikayla Stephenson, Niki Munk, PhD, LMT

Introduction: Health behaviors are associated with attitudes and perceptions. Throughout childhood, health-care decisions are made by parents and guardians, and are thus influenced by the attitudes of caregivers. Adolescence is the first time in a person's life when he or she is able to start making those decisions for his or herself, and because they are in a period of transition to adulthood, adolescences may be more open to nontraditional health-care practices such as massage therapy to which they may have not been previously exposed. Gaining an understanding of adolescents' attitudes toward massage therapy may help predict their potential to use massage therapy as a component of health care.

Objectives: This study sought to begin understanding how adolescents perceive massage therapy using the Attitudes Toward Massage (ATOM) scale and the Clinical Expectations of Massage Scale (CEMS). This study did not include the administration of massage therapy, and is the first to focus exclusively on young people's attitudes and perceptions of massage therapy and combine the ATOM and CEMS measures.

Methods: Cross-sectional survey design with Research Electronic Data Capture (REDCap) to collect all data online from a convenience sample of students on a large urban campus. Participants had to

be at least 14 years old and were recruited through social media, flyers, word-of-mouth, and personal invitation. The ATOM scale is a 9-item scale resulting in an overall attitude of massage score and two subscales: Massage as Healthful and Massage as Pleasant. The CEMS is a 16-item scale with a four-factor structure to categorize clinical, education, interpersonal, and outcome expectations. This study was approved by the IU Office of Research Compliance (IRB#1706794664).

Results: Ninety-two (N=92) young people (14–24; mean=17.32±2.03) participated in the study with 36 reporting receiving professional massage in their lifetime (39%). Fewer (n=15; 17%) reported massage within the past year. Overall ATOM scores were positive (mean=33.55±5.28). Notably, adolescents who received massage within their lifetime had more positive attitudes and perceptions toward massage therapy (36.39±4.93, range 23–43, $p=.002$). A general preference for female massage practitioners was reported by participants. Overall CEMS scores were positive (mean=80.38±13.26), and subscores generally followed suit. No statistically significant difference was found in overall scores or subscores between gender groups ($p>.65$) or experience groups ($p>.79$).

Conclusion: Massage was reported to be healthful and pleasant by most respondents. Adolescents with professional massage experience reported significantly more positive attitudes. A similar proportion of male and female adolescents expressed their comfort with male massage practitioners, but both genders had a preference for a female massage therapist. The current study provides a design framework to examine the extent to which massage experience impacts related attitudes and subsequent utilization.

MASSAGE FOR COMBAT INJURIES IN VETERAN WITH PTSD: A RETROSPECTIVE CASE REPORT

Mica Rosenow and Niki Munk, PhD, LMT

Introduction: Massage is reported to reduce chronic pain in combat wounded veterans. Additional benefits of massage include improved emotional health and disassociation related to Post Traumatic Stress Disorder (PTSD). Veterans are often

unable to give comprehensive details of circumstances related to injury. Difficulty in acceptance of treatment and trust in treatment providers is increased after life-threatening traumatic injuries. Disability stigma, discrimination, and acceptance create hesitancy of disclosure for those seeking care with invisible or rehabilitated disorders.

Objective: Examine massage therapy's use to improve Veteran experience of combat injury rehabilitation and recovery through purposive, retrospective, and comprehensive SOAP note review.

Case presentation: 31-year-old White male with undisclosed, diagnosed PTSD sought massage eight years after receiving a broken humeral head and complete right shoulder dislocation during real time, hand-to-hand defense of life-threatening attack and post-surgical repair (~3 months post-injury, ~1 month post-war zone removal). Six weekly, full body, 60-minute massages were administered with follow-up treatment at Week Eight (7 total treatments). Focused injury treatment included trigger point therapy, myofascial release, and proprioceptive neuromuscular facilitation of the right chest, shoulder, and neck. Goniometer measurement assessed active and passive shoulder range of motion before treatment in Weeks One, Six, and Eight, and after treatment in Week Eight. Treatment environment comfort behaviors were observed, documented, and serve as measurement of stress, anxiety, and acceptance of treatment. Client treatment goals: Increased range of motion, chronic pain reduction, and return to pre-injury fitness activities. Client consent to publish case obtained [documentation upon request].

Results: Active flexion, extension, abduction, adduction, internal and external rotation range of motion showed 12.5, 150, 40, 166.7, 14.3, and 0% increase after follow-up treatment in Week Eight, respectively. Passive range of motion showed 63.6, 350, 66.7, 450, 133.3, 77.8% increase after follow-up treatment in Week Eight, respectively. Environmental comfort behaviors related to control went from requiring music choice, open door, and fully lit room with difficulty maintaining prone position to acceptance of therapist alterations in all but music choice. Client reported massage treatment facilitation reaching the primary goals, in addition to increased self-efficacy and regained trust in his body. Client has continued to utilize massage for seven years

following this case's reported duration to address episodes of acute pain, pre-existing conditions management, and as a complement to allopathic treatments of emotional disturbances related to PTSD officially disclosed years after initial treatment.

Conclusion: Massage therapy provided meaningful benefit to a combat injury for a veteran with PTSD. A descriptive inverse relationship occurred between pretreatment shoulder range of motion and controlling environmental comfort behaviors. This case provides an example of how detailed SOAP notes from established massage therapists may provide a wealth of knowledge in effective therapeutic protocol approaches for special populations hesitant to reveal physical or mental health diagnosis due to fear of stigma or discrimination.

A CASE STUDY: CAN MASSAGE LOWER INTRAOCULAR PRESSURE?

Meir Schneider, PhD, LMT, Richard Miller, MFA, LMT

Introduction/Background: Childhood glaucoma is responsible for approximately 5% of blindness in children worldwide. It is a heterogeneous group of diseases which are ultimately associated with elevated Intraocular Pressure (IOP) leading to optic nerve damage and visual loss.

Objective: To evaluate the outcomes of massage in conjunction with body/eyes exercises in a pediatric patient who had contracted glaucoma as a side effect of medication.

Case presentation: A seven-year-old boy developed glaucoma as a side effect of taking strong steroids to treat uveitis, an inflammation of the middle layer of the eye. The patient's untreated IOP was 52 mmHg. His IOP was lowered to 40 using standard glaucoma medications. An IOP of 40 is still twice the normal level of 20 and high enough to cause visual loss. The boy did have visual loss in the periphery of his right eye. Over a two-week treatment period the boy received daily massages, as well as body and eye exercises. The daily protocol of self-healing included 30 minutes of a specialized, neurological form of massage, 10 minutes of hot and cold therapy, followed by movement exercises to increase blood flow and eye exercises to encourage healing of the visual system.

Results: An Icare Home Tonometer was used to measure the final IOP numbers. After the second week of treatment the boy's IOP went down to 31.

Conclusion: This use of massage, in conjunction with exercises for the body and eyes, holds promise for the millions of people facing vision loss or even blindness due to this incurable disease.

PRACTICE-BASED RESEARCH NETWORKS AND MASSAGE THERAPY: A SCOPING REVIEW

Samantha Zabel, MA and Niki Munk, PhD, LMT

Introduction: Practice-based research networks (PBRNs) are means to connect practitioners with researchers and increase the body of rigorous research. PBRNs have been used in medicine for decades, but efforts to create these networks in massage therapy are currently limited.

Purpose: Examine and describe the amount and nature of massage therapy-related publications derived from PBRN-supported endeavors.

Methods: Databases: Scopus, CINAHL, PubMed, ClinicalKey, EMBASE, Google Scholar. Keywords: Massage, massage therapy, practice-based research network, PBRN. Key extraction items: Publication year, operating PBRN, article type, study design, general theme, massage therapist involvement/massage application. Inclusion criteria: Studies conducted through a PBRN using massage therapy or massage therapists as an investigated factor; articles and editorials focused on PBRNs related to massage therapy research.

Results: Initial database search resulted in 414 records. After eliminating duplicates, no-text citations, and ineligible articles based on abstract/text screening, 36 articles were included from the database search, PBRN website access, and PBRN staff contacts. Publication dates ranged from 2005 to 2018, with nearly all published since 2013. BraveNet and the Practitioner Research and Collaboration Initiative (PRACI) networks are the most prolific publishing PBRNs (8 and 7 articles, respectively), with 19 other articles involving massage stemming from 7 other PBRNs. Two additional commentaries discuss the need for PBRNs in massage therapy, but

were not connected to a particular PBRN. Articles were grouped into three categories: Commentaries on the importance of PBRN research in massage therapy (n=7), oral or poster presentation abstracts (n=8), and research studies (n=21). Most research studies were conducted as surveys (n=18), examining practice characteristics (n=9) and patient perspectives/utilization (n=7). Most studies did not involve the application of massage.

Conclusion: The PBRN model holds promise to further the field of massage therapy, but the implementation needs significant development. Promoting the creation and growth of massage-specific

PBRNs should be a focus of professional associations and research institutions in order to expand the body of real-world scientific evidence supporting massage therapy. It is notable that, while the US has had the most PBRN-related research efforts, a sustainable implementation model is not evident as highlighted by the dissolution of BraveNet in 2015 and inactivity from other PBRNs after initial productivity. PRACI may serve as a needed sustainability model for massage related PBRNs in the US if their productivity trajectory is continued. This initial consideration of massage-related PBRNs seeks to promote the advancement of PBRN utilization in massage therapy research.