

Massage Therapy Foundation

Mission Statement

The Massage Therapy Foundation advances the knowledge and practice of massage therapy by supporting scientific research, education and community service.

Executive Summary of Recommendations from the Massage Research Agenda Workgroup (MRAW)

- 1. Build a research infrastructure within the massage therapy profession.** Encourage development of a research literate massage therapy profession through several means. Work with the Commission on Massage Therapy Accreditation (COMTA), the AMTA Council of Schools (COS) and the National Certification Board in Therapeutic Massage and Bodywork (NCB) to establish research as a core competency in the professional education of massage therapists. Fund the education of massage therapy researchers. Foster collaborations, create pathways and establish linkages that encourage interactions of massage therapists with physicians, clinical and experimental researchers, and social scientists.
- 2. Fund research into the safety and efficacy of massage therapy.** Begin by funding studies that compare the relative effectiveness of different massage modalities for a given condition and then fund studies that compare the optimum massage therapy for a given condition with other standard methods of care (medical, chiropractic, acupuncture, etc.). The MRAW suggested four primary prevention studies, two secondary prevention studies and replication studies.
- 3. Fund studies of physiological (or other) mechanisms by which massage therapy achieves its effects.** The MRAW further suggested funding systematic documentation of physiological effects of massage and explorations of the dimensions and effects of “subtle energy.”
- 4. Fund studies stemming from a wellness paradigm.** Document what “wellness” means to stakeholders. Establish the dimensions of the effects of massage therapy on “self-healing” and align these studies with the study of physiological mechanisms above. Explore the interaction of consciousness, wellness and the actual practice of massage therapists.
- 5. Fund studies of the profession of therapeutic massage.** Fund studies that determine what makes a “good” or “great” massage therapist, document how massage therapists are perceived by themselves and others; evaluate the client assessment skills of massage therapists; and explore the dimensions of the therapeutic encounter.

INTRODUCTION

Rigorously controlled and replicated research is a key to the professionalization of any health care field. Reliable research findings are a prerequisite for access to many contexts in which massage therapists practice or would like to practice. For these reasons, the Massage Therapy Foundation convened a three-day working conference of research scientists and massage therapists/bodyworkers in March 1999 to frame a research agenda for the field of therapeutic massage and bodywork. Without the active participation of members of the massage profession in deciding what research should be done, there is every possibility that knowledge generated from future research would not be relevant or of value to massage therapists or to their clients.

In preparation for the meeting, the Foundation recognized that various constituencies already held agendas, which would need to be articulated and addressed. Prior to the meeting, a website survey and focus groups conducted by the Foundation revealed that massage therapists had three key goals that needed to inform the research agenda.

1. Massage therapists want more people to seek regular massage for health maintenance and well-being. What is the research agenda that might lead to this?
2. Massage therapists want to understand more clearly how and why their work is effective or ineffective. What is the research agenda that will lead to this understanding?
3. Some massage therapists want to be reimbursed by third party payers for their work. What is the research agenda most likely to lead to this?

Other health care professionals also have concerns and questions that would drive their agenda for our field. For example, physicians and health care administrators want to know when to refer for massage and which kind of massage to recommend for which conditions. What is the research agenda that will help these health care professionals?

Thus the Massage Therapy Foundation convened a Massage Research Agenda Workgroup (MRAW), which included physicians, clinical and experimental scientists, social scientists and massage therapists and bodyworkers all selected to represent a relatively broad spectrum of expertise in their fields. The group included Americans, Canadians and Europeans.

All workgroups of the MRAW included at least one massage therapist, one clinical or survey research scientist, and one bench or biological scientist. Members of the MRAW were struck by how valuable these multi-disciplinary groups were. The MRAW cautioned against the all-too-frequent practice of research in CAM in general and therapeutic massage specifically, being designed and conducted without the benefit of any practitioners involved in conceptual roles. Members of the MRAW highly recommend the creation of multi-disciplinary teams at least during the design phase.

In preparation for the meeting, the Massage Therapy Foundation commissioned a background paper¹ that: looked at issues of fit between the realities of massage treatment and the requirements of currently accepted research methodologies; examined claims made in major massage texts about the effects of massage (they found many claims and little research cited); reviewed the existing massage research literature; and circulated to participants two recent reviews of the literature, noticing shortcomings and areas of promise. What follows is a review of the recommendations of the MRAW.

ARENAS OF INQUIRY

The MRAW divided the general arena of **clinical research on safety and efficacy**, into two distinct categories:

- **Studies that compare the relative effectiveness of specific massage modalities to one another**, seeking the strongest treatment for each condition/population/situation, and
- **Studies that examine massage in comparison with other treatments** (e.g., massage therapy versus usual allopathic care or chiropractic treatment).

¹ Cassidy, C. (1999). Methodological issues in investigations of massage/ bodywork therapy.

Studies of efficacy and outcome lead to **questions of mechanism**. There has been little done in this area for the field of massage. For example, premature infants gain more weight when they receive regular massage therapy than premature infants fed the same number of calories but do not receive regular massage therapy. Through what mechanism is massage therapy causing these results?

The final arena of inquiry that was identified was **socio-cultural knowledge**, which includes basic descriptive information about who seeks massage; how it is viewed by consumer, physicians, and others; and how massage therapists define the goals of treatment.

SPECIFIC RECOMMENDATIONS

The workgroup made a range of recommendations covering not only what kinds of studies ought to be done, but also how they might best be done, and what conditions must be met in order to move the agenda forward.

BUILD A MASSAGE RESEARCH INFRASTRUCTURE

The MRAW strongly emphasized that a field needs a research infrastructure in order to follow through on any research agenda. It is suggested that this infrastructure, crucial to the development of the profession, may be built through the following activities:

- Fund the education of researchers prepared to dedicate their careers to massage therapy research.
- Encourage the development of a research literate profession by teaching basic research literacy skills in massage schools and in continuing education contexts. This would include teacher training in this vital area. Continuing education could be supported through the creation of a self-study module, as well as workshops offered in research literacy, research methods and internships for participation on research teams.
- Work with the Commission on Massage Therapy Accreditation (COMTA), the Council of Schools (COS) and the National Certification Board in Therapeutic Massage and Bodywork (NCB) to establish research as a core competency in the professional education of massage therapists, as it is in many other professions.
- Create ways for people to be involved in research, including teaching massage therapists how to develop good case histories. A database of solid and informative cases would be a gold mine of ideas and evidence for later research. Encouraging more uniform training in systematic record keeping is also associated with this.
- Foster collaboration and mutual education between medical schools and massage schools.
- Create pathways for the development of a massage research community including
 - ongoing workgroups
 - a virtual community or moderated chat room of massage research enthusiasts
 - research networks such as the hospital based massage research network
 - special interest groups on research within AMTA or across professional associations.

- Establish linkages between massage therapists and academics / researchers including those already interested and active in this field and those that we feel ought to be interested because of mutual concerns.
- Fund developmental grants to support the time it takes people to develop conceptually elegant experiments with sufficient statistical power to allow a definitive outcome.
- Disseminate this agenda as widely as possible to inform and stimulate interest among the health care research community.
- Fund, through the AMTA and/or Massage Therapy Foundation, high priority studies that will both advance the knowledge in the field and establish the viability of massage as an area of inquiry.

FUND RESEARCH INTO SAFETY & EFFICACY OF MASSAGE THERAPY

Studies must be funded to identify those applications of massage therapy that are safe and have identifiable benefit and those that are not reliably effective and/or carry associated risk. The MRAW recommended as highest priority studies of the comparative efficacy of different kinds of massage therapy/bodywork in relation to a particular condition or goal, and then utilize the most effective massage protocol in clinical trials comparing massage with standard medical, chiropractic or other forms of care for the same conditions.

The following considerations went into identifying the specific safety and efficacy studies recommended below.

- Studies must preserve public health and safety
- Studies must alleviate human suffering and associated costs
- Studies should be undertaken when the expectation that massage therapy/bodywork will be beneficial in a particular situation rests on good anecdotal evidence, pilot data, and/or on a firm theoretical basis
- Studies receive a higher priority when the current usual treatment is unacceptable in one or more ways including high cost, adverse side effects or pain and/or inconvenience of the treatment itself
- The condition being studied should be sufficiently prevalent that the study will address a situation affecting many people's lives
- Study subjects should be readily available
- Study must have a clearly defined massage intervention and unambiguous outcomes / endpoints and also must be of import to stakeholders
- The treatment, if successful, should be relatively easy to adopt.

It was acknowledged that high impact efficacy studies might focus on either primary or secondary prevention, within a clinically oriented pathology model, or draw more upon a "wellness agenda." Illustrative examples were generated during preliminary design sessions that utilized small teams including at least one massage therapist, one clinical researcher and one basic science researcher.

SUGGESTED PRIMARY PREVENTION STUDIES

Workplace-Based Primary Prevention

Massage therapists often hear from clients that regular massage provides a host of benefits both in mood and physical health. Yet the effects of regular massage on a “healthy” population have never been studied. The MRAW endorsed as a priority a study that would examine (as key outcomes) the potential for regular massage to effect the frequency, duration and associated cost of injuries and illnesses common to a particular workplace, as well as exploring a range of promising outcomes including worker satisfaction with job, mental health outcomes, satisfaction with home life, etc.

Massage to Prevent Congestive Heart Failure

This was offered as an example of a condition-specific primary care study. The goal of such a study would be to examine the potential for massage to prevent congestive heart failure among people who appear at high risk. Subjects might be patients 40+ years of age, diagnosed with moderate to severe hypertension and perhaps receiving medication for high blood pressure. They would be under the care of a physician and maintain regular visits to monitor their condition. Exclusion criteria would need to be developed and might include concurrent chronic diseases such as diabetes, kidney or liver failure, COPD, etc. Ideally the sample population would be ethnically diverse and include both males and females with sufficient sample size to allow for gender comparison. Subjects would be randomized to defined conditions such as a) normal care, b) normal care plus weekly massage, and c) a control group receiving normal care plus some other form of high contact care. Length of treatment would be determined by an examination of what is already known about the ability of massage to affect blood pressure. The principle outcomes would be BP, medication use, and of course, incidence of congestive heart failure.

Massage and Musculoskeletal Disorders such as Scoliosis

The lack of research on the use of massage in relation to musculoskeletal disorders is striking. In fact, musculoskeletal conditions may be the most promising arena for primary prevention investigations. Based on the experience of practitioners present at the MRAW, scoliosis was recommended as one study possibility.

The goal of such a study would be the prevention of a need for scoliosis surgery. It was stressed that this study should be done as a comparison of massage and usual care only after the within-massage/bodywork studies have been done to determine the most beneficial treatments for this condition. Subjects would be adolescents aged 12-18, recruited from a scoliosis clinic at the point when they are designated as candidates for future surgery. The length of treatment would be determined on the basis of existing data, but likely would be lengthy. The principle endpoint would be whether surgery was determined to be needed. The length of time to follow the subjects would be determined after consultation with experts in the field.

Low Back Pain Studies

Studies on low back pain fit into two larger categories of investigation of the effects of massage on musculoskeletal disorders resulting in acute and/or chronic pain.

Initial work has begun in this field. Researchers at Group Health Center for Health Studies and Beth Israel Deaconess' Center for Alternative Medicine Research and Education are conducting high quality comparisons of massage and other treatments for lower back pain (both acute and persistent). Cherkin et. al² indicates possible directions for additional work. For instance, given the relative success of massage compared to acupuncture and self-education shown in the Cherkin study, further investigations could attempt to determine whether there is a "best" massage treatment for persistent low back pain.

SUGGESTED SECONDARY PREVENTION STUDIES

The MRAW recommended that attention be given to designing high quality studies examining the potential of massage in the area of secondary prevention. Two examples were given.

Study of the Potential for Massage Therapy to Prevent Falling Among The Elderly

Falling is a frequent occurrence among elderly persons, which results in both personal and social costs. With an aging population, such as exists in most industrialized countries, this issue will be of great interest.

It is often said by massage therapists that massage could be used to improve "groundedness" and balance. This could be tested in an elderly population. Subjects could be recruited through private physicians or medical centers after their first visit to a doctor for a fall. Age-related stratification of sample populations may be necessary. Subjects would be randomized to at least two conditions. One group would receive massage (the frequency and number of treatments to be set by the study team), and the other group would receive no massage treatment. Principle outcome measures could include both objective measures related to falling such as the time between falling episodes and the severity of injuries incurred, as well as measures related to quality of life.

Secondary Prevention of Depression

Thousands of Americans experience depression and/or take antidepressant medications. This is a painful and costly condition, often accompanied by the unwanted side effects of antidepressants. Depression is effecting younger and younger populations. It is a worthy subject of investigation and preliminary data from studies done at the Touch Research Institute indicate massage may be an effective treatment. Subjects in such a study would be patients who already have experienced clinical depression and are deemed in remission. They would be randomly assigned to massage or no-massage treatment. The frequency and duration of treatment would be determined after examination of existing data. The principal outcome measure would be remission/relapse rate as indicated by future diagnoses of depression, use of antidepressants, and self-reports.

SUGGESTED REPLICATION STUDIES

One effect of the relative lack of funding for massage research, and the lack of acknowledged agenda for the work, is that few studies with promising results have been replicated. This is a serious, but easily remedied

² Cherkin, D. et al. (2001). Randomized trial comparing traditional Chinese medical acupuncture, therapeutic massage, and self-care education for chronic low back pain. *Archives of Internal Medicine*, 161, 1081-1088.

problem and the MRAW named replication of the best studies as one of the research priorities for the field of therapeutic massage and bodywork.

FUND STUDIES OF PHYSIOLOGICAL (OR OTHER) MECHANISMS BY WHICH MASSAGE THERAPY ACHIEVES ITS EFFECTS

Inquiry into the avenues through which massage produces its effects is a pertinent and wide-open area for investigation. A myriad of studies could be conducted under this general heading.

Systematic Documentation Of the Physiological Effects of Massage

It would be useful to conduct research designed to describe the physiological effects of massage separate from the matter of clinical impact. There are physiological effects that are regarded by many as established, but which have not been investigated since the advent of recent measurement tools. The claim that massage increases circulation of blood and lymph would be an example of this, as would investigation of the extent to which massage elicits sympathetic or parasympathetic response. Also, it would be useful to conduct research on the nature of fascia and its role in the effects of massage.

Seeking Explanations of Established Effects

Where certain effects of massage have been repeatedly demonstrated, it would be beneficial to establish how the body produces the effect. For instance, studies investigating the effects of massage on premature infants have consistently shown that those infants receiving massage have significantly greater weight gain than the unmassaged infants (a range of 28-47%), without any greater caloric intake. The mechanism of this weight gain has never been demonstrated.

Explorations of Subtle Energy

It was acknowledged by the MRAW that much is speculated or claimed, but little is actually known, about subtle energy and its role in healing in general and therapeutic massage in particular. Nonetheless, some massage schools and modalities teach “energy balancing” of one sort or another, and some massage education includes instruction in awareness of energy resonance and/or exchange between practitioner and client. While there are no agreed upon instruments of measurement for such subtle energy, the MRAW recognized the importance of the development of this field for a complete understanding of the effects of therapeutic massage and bodywork. We believe subtle energy should be studied both as a dimension of the therapeutic encounter and as a purposeful aspect of treatment.

FUND STUDIES STEMMING FROM A WELLNESS PARADIGM

Contemporary clinical research methodology and the questions it is designed to address have developed largely from within allopathic medicine, and thus, within a pathology-oriented framework. While therapeutic massage and bodywork is used to address such allopathically defined conditions, it is also, perhaps even more frequently, used for what clients and practitioners refer to as “wellness.”

There are research questions that arise from a wellness paradigm that may not arise from a pathology paradigm and these, too, are important to pursue for an understanding of the effects of therapeutic massage.

While wellness therapies may be the least “reimbursable” treatments at present, they may also be those most likely to ultimately change modern medicine and public health. The research needed includes qualitative studies aimed at eliciting operational definitions of heretofore vague terms (e.g. wellness, groundedness, centeredness, balance, etc.), descriptive studies, and “clinical” research. The following questions arose during MRAW discussions of these issues:

- What is wellness? According to client reports, in 1999, more than 25% of visits to massage therapists are made for wellness. We need to know how clients define wellness when they seek it, and how they know when it has been achieved. We need to know how massage therapists define wellness when they say they offer treatments designed to enhance it.
- If we assume that the body is “self-healing” and that massage can somehow jump-start that healing process, how does this happen? Are the effects we see such as weight gain in premature infants, enhanced immune function among HIV+ men, etc. indications of this? What does jump-start mean?
- What is the interaction of consciousness and wellness? Do massage therapist practicing “wellness massage” tend to make suggestive comments during treatment? Are silent treatments more or less effective than treatments that include such suggestions?

Beyond “wellness,” once it is defined, there lies the potential to investigate the role of massage in achieving peak performance. Such studies could include athletes, musicians and other performers already exploring the issues of human potential and peak performance. The issues can also be explored in relation to enhanced performance in other roles such as defense personnel, air traffic controllers, people in or just before high performance task situations (e.g. students taking exams), medical interns, 911 operators, children showing difficulty at school, care givers of all kinds, and those at the end of life.

FUND STUDIES OF THE PROFESSION OF THERAPEUTIC MASSAGE

Despite its status as a healing modality that has existed for thousands of years across many cultures, there has been little systematic investigation of massage as a profession, including issues of training, public perception, and the like. The MRAW recommended strongly that this situation be remedied, and made a few specific suggestions.

The Search for Excellence

Little is known about what makes a “superior” massage therapist. This sentence has two separate meanings, both of which are important. First it reflects the fact that there is no agreed upon definition or description of a “good” massage therapist. The agreed upon training standards are stated in terms of hours of training (generally 500 hours in the United States, 2500 hours in Ontario, 3200 hours in British Columbia) rather than areas of competence, although this is about to change. Secondly it reflects the reality that there has been no systematic evaluation of educational practices in the profession. We do not know how one best trains a good massage therapist, or even the extent to which excellence in this field can be taught or is the result of a gift.

A range of studies could be designed to fill these gaps, from qualitative work to establish definitions of excellence in the field, to quantitative studies which ascertain whether such peer or client defined “excellence” corresponds to positive clinical results, to educational evaluation research geared to determining how both material and skills can be effectively transmitted. Furthermore, given the lack of uniformity in training in the United States today, it would be useful for the public to know how broad the range of skill or competence is among professional massage therapists who are trained at accredited institutions.

How Massage Therapists Are Perceived By Themselves and Others

During the meetings of the MRAW, it became clear that the massage therapists regard client education as one of their critical roles and that the researchers did not initially share this view. This is a significant difference, and served to remind the MRAW that it would be of benefit to both the profession and the public to gather information about how massage therapists view their role and whether there is systematic variation in this by region, degree of training, years in practice, etc. It would also be of value to gather information on how the profession is perceived by the public, including clients, potential clients, referring health professionals, and health professionals in general. How do these groups view the work/role of massage therapists, and assess the effectiveness of massage therapists? How do all these groups view the role of clients? Are they thought of as passive recipients of a service or therapy? Do clients expect to learn from their massage therapists? Etc.

Evaluating Assessment Skills of Massage Therapists

Diagnosis falls outside the scope of practice of massage therapy. At the same time, massage therapists assess and reassess what is happening with clients in order to make decisions about treatment design. In part, because of the legal situation, our assessment has not been well studied, but it needs to be. In particular, it is important to study what is taught about assessment in comparison with what is practiced. Comparisons of this across regions with differing legal situations would be useful. In addition, it is vital to know whether there is inter-rater reliability in the area of assessment. That is, would different massage therapists, asked to assess the same clients, draw the same or different conclusions as to what is happening? Would they then design identical, similar, or widely varying treatment plans?

Dimensions of The Therapeutic Encounter

Finally, it was recognized that little investigation has been done on the therapeutic encounter itself within massage treatment. This is an important and potentially delicate area of inquiry, particularly within a climate in which much of what massage therapists may value as good practitioner/client interaction is seen, in another framework, as contamination or placebo effect. Nonetheless, or perhaps because of this, it is important to create ways of investigating the effects of everything from practitioner influence (both purposeful and accidental), to the influence of such environmental factors as music, lighting and so forth. What is the role of the practitioner/client relationship? How important is this attunement and how can one measure it? What therapist characteristics make a difference? How do you measure entrainment, e.g. EEG entrainment between client and therapist or pulse entrainment? Finally, assuming there is some “practitioner effect,” it would be of value to determine ways of identifying characteristics that help match clients and therapists.

CONCLUSION

The field of research in therapeutic massage and bodywork is just beginning to develop. This is an important step for a health care modality that is used widely but lacks extensive, rigorous data on its safety and efficacy. Many forms of research will be beneficial during this early, formative phase in the professionalization of massage in modern contexts. It is hoped that between federal and private funding sources, significant aspects of the work suggested here will be accomplished in the near future.

**The following individuals participated in the
Massage Research Agenda Workgroup:**

Researchers:

Alan Best, Ph.D., Senior Scientist, Centre for Clinical Epidemiology and Evaluation, Vancouver Hospital and Health Science Centre, Vancouver, British Columbia, Canada;

Leon Chaitow, D.O., (In Absentia). Senior Lecturer, University of Westminster, London, England;

Dan Cherkin, Ph.D., Senior Scientific Investigator, Group Health Center for Health Studies, Seattle, Washington;

David Eisenberg, M.D., Director, Center for Alternative Medicine Research and Education, Beth Israel Deaconess Medical Center, Boston, Massachusetts;

Robert L. Kahn, Ph.D. (In Absentia), Research Scientist, Institute for Social Research, Professor Emeritus of Psychology and Public Health, University of Michigan, Ann Arbor, Michigan;

Brian Marcotte, Ph.D., (AMTA Foundation Trustee,) CEO and Director, Strategic Analysis, Inc., Providence, Rhode Island;

James Oschman, Ph.D., President, Nature's Own Research Association, Dover, New Hampshire;

Candace Pert, Ph.D., Research Professor, Department of Physiology and Biophysics, Georgetown University Medical Center, Washington, D.C

Massage Therapists:

Doug Alexander, Founding and Current Editor-in-Chief, *Journal of Soft Tissue Manipulation*, Ottawa, Ontario, Canada;

Judith Aston, Founder and Director, Aston-Patterning, Incline Village, Nevada;

Debra Curties, Executive Director, Sutherland-Chan School and Teaching Clinic, Toronto, Ontario, Canada;

Deane Juhan, Instructor, Trager Institute, Mill Valley, California;

George Kousaleos, Founder and Director, CORE Institute, Tallahassee, Florida;

E. Houston LeBrun, Past President AMTA, Private Practice, Seattle, Washington;

Carole Osborne-Sheets, Licensed Holistic Health Practitioner, Co-Founder and Instructor, International Professional School of Bodywork, San Diego, California;

Lawrence E. Warnock, Ph.D., Executive Director and Owner, The Center for Health and Athletic Performance, Inc. and The Student-Athlete Educational Foundation, Reading, Massachusetts

College of Massage Therapists of Ontario:

Deborah Worrada, CAE; Registrar, College of Massage Therapists of Ontario, Toronto, Ontario, Canada

Foundation Officers and Staff:

Janet Kahn, Ph.D., Foundation Past-President;

Martha Brown Menard, Ph.D., Foundation Past-Vice President,

Gini Ohlson, Director of Development and Foundation Manager,

Grant Rich, A.B.D., Notekeeper.