



Canadian Massage Therapist Alliance Alliance Canadienne de Massothérapeutes

## Evidence Informed Practice in Massage Therapy

Research-informed, clinically sound, and patient-valued // June 1, 2021





Claims and Anti-Fraud Conference

2021



Canadian Life & Health Insurance Association

Association canadienne des compagnies d'assurances de personnes



## Presentation Outline



- Evidence-Informed Massage Therapy (MT) Practice
- Massage Therapy & The Healthcare System
- About Massage Therapy and Registered Massage Therapists (RMTs)
- Evidence of benefit of massage from the biological / social / psychological perspective
  - Massage Therapy & Pain, Massage Therapy and Mental Health,
- Questions and Discussion



# Evidence-Informed Massage Therapy (MT) Values



- Research-informed, clinically sound, and patient-valued MT practices are critical in integration into the health care system.
- MT research is informed by a range of perspectives, expertise, and insights including inter-disciplinary and inter-professional collaboration, funding, and conduct.
- MT research involves the use of accepted and appropriate research methods and requires methodological development.
- Research evidence is understood by MTs as having intrinsic value





"Integrative medicine and health reaffirms the importance of the relationship between practitioner and patient, focuses on the whole person, is informed by evidence, and makes use of all appropriate therapeutic and lifestyle approaches, healthcare professionals and disciplines to achieve optimal health and healing".

https://imconsortium.org/about/introduction/

Academic Consortium for Integrative Medicine & Health



#### Collaborative Vision



 "the development of a scientific knowledge base, appropriate clinical expertise, and a complementary, integrative, mind/body perspective can positively influence the medicine of the future". https://imconsortium.org/about/introduction/

 "contribute to the articulation of a new paradigm for medicine, one that truly integrates, on all levels, the best of conventional, mind/body, complementary, and non-traditional approaches to health and illness" <a href="https://imconsortium.org/about/history/">https://imconsortium.org/about/history/</a>

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# About Massage Therapy and Massage Therapists



 Massage therapy is a treatment process developed to use gentle stretching, mobilization and soft tissue manipulation techniques

 Registered Massage therapists are trained in the principles of anatomy, physiology, pathology, massage theory and practical applications of massage, remedial exercise, and self-care.





## A Bridging Therapy: Getting from treatment to self-care



Helping clients get moving

Supporting active participation

Easing pain and improving function

Individualized, multimodal, and stepped care





#### Selected Economic Evaluation



Herman PM, Yuan AH, Cefalu MS, Chu K, Zeng Q, Marshall N, et al. (2019) The use of complementary and integrative health approaches for chronic musculoskeletal pain in younger US Veterans: An economic evaluation. PLoS ONE 14 (6): e0217831. <a href="https://doi.org/10.1371/journal.pone.0217831">https://doi.org/10.1371/journal.pone.0217831</a>

- The results showed lower healthcare costs and reduced pain for Veterans who used CIH: an average of \$637 (USD) lower healthcare cost
- In a cohort of younger Veterans with chronic MSD pain during 2010 through 2013, any use of CIH was not only cost-effective, it was also cost saving.



#### Occupational Stress in Emergency Medicine



Mahdizadeh M, Jaberi AA, Bonabi TN. Massage therapy in management of occupational stress in emergency medical services staffs: a randomized controlled trial. International journal of therapeutic massage & bodywork. 2019 Mar;12(1):16.

- Supporting frontline healthcare workers
- Testing hypotheses



#### Cost Savings in Hospital Setting



Dusek JA, Griffin KH, Finch MD, Rivard RL, Watson D. Cost savings from reducing pain through the delivery of integrative medicine program to hospitalized patients. The Journal of Alternative and Complementary Medicine. 2018 Jun 1;24(6):557-63.

- For patients receiving IM therapies, pain was reduced by an average of 2.05 points and this pain reduction was associated with a cost savings of \$898 per hospital admission.
- Conclusions: For patients receiving IM therapies, pain was significantly reduced and costs were lowered by about 4%.



# Evidence of Benefit in Outpatient Populations – Systematic Reviews



Kong LJ, Zhan HS, Cheng YW, et al. Massage therapy for neck and shoulder pain: A systematic review and metaanalysis. Evid Based Complement Alternat Med 2013; 2013:613279.

Crawford C, Boyd C, Paat CF, et al. The impact of massage therapy on function in pain populations-a systematic review and meta-analysis of randomized controlled trials: Part I, patients experiencing pain in the general population. Pain Med 2016;17:1353–1375

FurlanAD, Yazdi F, TsertsvadzeA, et al. A systematic review and meta-analysis of efficacy, cost-effectiveness, and safety of selected complementary and alternative medicine for neck and low-back pain. Evid Based Complement Alternat Med 2012;2012:953139



## Massage Therapy & Pain



Musculoskeletal pain (e.g., back pain, neck pain, osteoarthritis) is the most common type of chronic pain.

Massage has been the subject of more than 300 clinical trials and

dozens of systematic reviews.

(Miake-Lye et al, 2019 Evidence Map)





#### Quality of Research and Gaps in Evidence



- A recent search of PubMed, Embase, and Cochrane for systematic reviews reporting pain outcomes for massage therapy identified 49 systematic reviews, of which 32 were considered high quality.
- Types of pain frequently included in systematic reviews were cancer pain, low back pain, and neck pain.
- Prior reviews have conclusions of low strength of evidence because few primary studies of large samples with rigorous methods had been conducted, leaving evidence gaps about specific massage type for specific pain.

Miake-Lye IM, Mak S, Lee J, Luger T, Taylor SL, Shanman R, Beroes-Severin JM, Shekelle PG. Massage for pain: an evidence map. The Journal of Alternative and Complementary Medicine. 2019 May 1;25(5):475-502.



#### Massage Therapy & Pain



Investigating efficacy of MT in treating pain, function-related and health-related quality of life outcomes across all pain populations:

- 60 high quality and 7 low quality studies.
- Results demonstrate massage therapy effectively treats pain compared to no treatment and active and sham comparators.
- Based on the evidence, massage therapy, compared to no treatment, should be strongly recommended as a pain management option.

Cindy Crawford, BA, Courtney Boyd, MA, Charmagne F Paat, BS, Ashley Price, BS, Lea Xenakis, MPA, EunMee Yang, MA, Weimin Zhang, PhD, Evidence for Massage Therapy (EMT) Working Group, The Impact of Massage Therapy on Function in Pain Populations—A Systematic Review and Meta-Analysis of Randomized Controlled Trials: Part I, Patients Experiencing Pain in the General Population, *Pain Medicine*, Volume 17, Issue 7, July 2016, Pages 1353–1375, <a href="https://doi.org/10.1093/pm/pnw099">https://doi.org/10.1093/pm/pnw099</a>



## Massage Therapy and Mental Health



#### Treating Generalized Anxiety Disorder

- Massage Therapy offers a somatic option alongside pharmacological and psychotherapeutic approaches
- MT approach may address issues of stigma of therapy and safety of medications

Mark Hyman Rapaport, Pamela J. Schettler, Erika R. Larson, Boadie W. Dunlop, Jeffrey J. Rakofsky, Becky Kinkead, Six versus twelve weeks of Swedish massage therapy for generalized anxiety disorder: Preliminary findings, Complementary Therapies in Medicine, Volume 56, 2021, 102593, ISSN 0965-2299, https://doi.org/10.1016/j.ctim.2020.102593



#### Massage Therapy and Mental Health



## Massage Therapy for Psychiatric Disorders

- There is a growing literature base describing the biology and neurobiology of massage therapy.
- Known cost and prevalence of psychiatric disorders: years living with disability

Rapaport MH, Schettler PJ, Larson ER, Carroll D, Sharenko M, Nettles J, Kinkead B. Massage therapy for psychiatric disorders. Focus. 2018 Jan;16(1):24-31.



#### Massage Therapy and Mental Health



## Massage Therapy and Depression

"Accumulating evidence exists that massage therapy alleviates symptoms of depression

as well as anxiety, pain, and perceived stress"

Eggart M, Queri S, Müller-Oerlinghausen B. Are the antidepressive effects of massage therapy mediated by restoration of impaired interoceptive functioning? A novel hypothetical mechanism. Medical hypotheses. 2019 Jul 1;128:28-32.



## Massage Therapy & Mental Health



Massage Therapy & Anxiety

Moyer CA, Rounds J, Hannum JW. A meta-analysis of massage therapy research. Psychol Bull. 2004 Jan;130(1):3-18. doi: 10.1037/0033-2909.130.1.3. PMID: 14717648.

This work can surely be considered seminal research in the study of MT for mental health.

The authors of a 2004 paper, who analyzed data from studies testing the effectiveness of MT, concluded that "[R]eductions of trait anxiety and depression were MT's largest effects, with a course of treatment providing benefits similar in magnitude to those of psychotherapy."



#### Massage Therapy and Select Return to Work Guidelines



Wong JJ, Shearer HM, Mior S, Jacobs C, Côté P, Randhawa K, Yu H, Southerst D, Varatharajan S, Sutton D, van der Velde G, Carroll LJ, Ameis A, Ammendolia C, Brison R, Nordin M, Stupar M, Taylor-Vaisey A. Are manual therapies, passive physical modalities, or acupuncture effective for the management of patients with whiplash-associated disorders or neck pain and associated disorders? An update of the Bone and Joint Decade Task Force on Neck Pain and Its Associated Disorders by the OPTIMa collaboration. Spine J. 2016 Dec;16(12):1598-1630. doi: 10.1016/j.spinee.2015.08.024. Epub 2015 Dec 17. PMID: 26707074.

 This review adds new evidence to the Neck Pain Task Force and suggests that mobilization, manipulation, and clinical massage are effective interventions for the management of neck pain.

Qaseem A, Wilt TJ, McLean RM, Forciea MA; Clinical Guidelines Committee of the American College of Physicians. Noninvasive Treatments for Acute, Subacute, and Chronic Low Back Pain: A Clinical Practice Guideline From the American College of Physicians. Ann Intern Med. 2017 Apr 4;166(7):514-530. doi: 10.7326/M16-2367. Epub 2017 Feb 14. PMID: 28192789.

"Given that most patients with acute or subacute low back pain improve over time regardless
of treatment, clinicians and patients should select nonpharmacologic treatment with
superficial heat (moderate-quality evidence), massage, acupuncture, or spinal manipulation
(low-quality evidence)"



# Thank you for your Time and Attention

