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Re: Natural Therapies review 2019/20

To whom it may concern

Thank you for the opportunity to provide input to the updated review of natural therapies 2019-2020.

Painaustralia is the national peak body working to improve the quality of life of people living with pain, their families and carers, and to minimise the social and economic burden of pain. Members include pain and other specialists, health practitioners, health groups, consumers and researchers. Painaustralia works with our network to inform practical and strategic solutions to address this complex and widespread issue.

Pain is a significant health, social and economic burden for millions of Australians and its prevalence is growing as the population ages and the rate of chronic conditions rises. It also carries a substantial economic cost to the nation, calculated at \$139.3 billion in 2018 comprising \$12.2 billion in health system costs; \$48.3 billion in productivity losses; \$66.1 billion in reduction of quality of life costs and \$12.7 billion in other financial costs, such as informal care, aids and modifications and deadweight losses.ⁱ

There is a growing consensus and research base that supports the importance of coordinated interdisciplinary management strategies to address pain, regarded as best practice, as well as strategies to prevent the escalation of acute pain to chronic pain.

Painaustralia believes in a multidisciplinary approach in treating and managing chronic pain. This approach promotes a more holistic evaluation where treatment is not a 'one-size-fits-all' but person-specific. Multidisciplinary treatment is defined as multimodal treatment provided by practitioners from different disciplines. For example: the prescription of an anti-depressant by a physician alongside exercise treatment from a physiotherapist, and cognitive behavioural treatment by a psychologist.

A multidisciplinary team is likely to include a physician, clinical psychologist or psychiatrist, physiotherapist or other allied health professional, pharmacist, dietician and social worker or counsellor.ⁱⁱ A multidisciplinary approach may include medical interventions and medication (which may or may not be required), but it primarily focuses on non-invasive and non-pharmacological treatments.

Some natural therapies can assist and aid in treatment and recovery for certain types of chronic pain, **as an addition** to multidisciplinary pain management. We have looked at the natural therapies specified in tranche one for the Natural Therapies Review 2019-20, specifically these include Naturopathy, Pilates, Rolwing, Shiatsu, Tai Chi, Western Herbalism and Yoga. We have focused on research from the last four years in accordance with Therapies 2019-20 review guidelines.

We believe there is updated evidence to support the use of naturopathy, tai chi, yoga and pilates for certain chronic pain conditions. These studies, together with their abstracts have been listed below as an attachment. The evidence for rolwing, shiatsu and western herbalism we found that the state of evidence has not shifted from 2015.

In conclusion, it is imperative that pain is prioritised through this Review, particularly the gaps in knowledge and practice. This includes understanding the causes and consequences of chronic pain and how some natural therapies may play a role in prevention and minimise its impact.

The translation and dissemination of such research is also important to ensure results can translate into health practice and policy, as well as be communicated to consumers.

Thank you once again for the opportunity to provide input to this review. Please do not hesitate to contact us should you need more information.

Yours sincerely



Carol Bennett
CEO

Naturopathy

Study

Stephen P. Myers and Vanessa Vigar, (20 Feb 2019), The State of the Evidence for Whole-System, Multi-Modality Naturopathic Medicine: A Systematic Scoping Review. J Altern Complement Med. 2019 Feb;25(2):141-168. doi: 10.1089/acm.2018.0340.

Abstract

Objective: To summarize the current state of the research evidence for whole-system, multi-modality naturopathic medicine.

Design: A systematic search for research articles from around the world was undertaken using MEDLINE, Embase, CINAHL, AMED, and WHO regional indexes. Naturopathic journals and gray literature were hand searched. No language restrictions were imposed.

Interventions: All human research evaluating the effectiveness of naturopathic medicine, where two or more naturopathic modalities are delivered by naturopathic clinicians, were included in the review. Case studies of five or more cases were included.

Results: Thirty-three published studies ($n = 9859$) met inclusion criteria (11 American; 4 Canadian; 6 German; 7 Indian; 3 Australian; 1 United Kingdom; and 1 Japanese) across a range of mainly chronic clinical conditions. The studies predominantly showed evidence for the efficacy of naturopathic medicine for the conditions and settings in which they were based.

Conclusions: To date, research in whole-system, multi-modality naturopathic medicine shows that it is effective for treating cardiovascular disease, musculoskeletal pain, type 2 diabetes, polycystic ovary syndrome, depression, anxiety, and a range of complex chronic conditions.

Pilates

Study

Lin HT, Hung WC, Hung JL, Wu PS, Liaw LJ, Chang JH. (2016) Effects of Pilates on patients with chronic non-specific low back pain: a systematic review. *J Phys Ther Sci*. 2016;28(10):2961–2969. doi:10.1589/jpts.28.2961

Abstract

In patients with chronic low back pain, Pilates showed significant improvement in pain relief and functional enhancement. Other exercises showed effects similar to those of Pilates, if waist or torso movement was included and the exercises were performed for 20 cumulative hours.

Study

de Oliveira, N.T.B., Ricci, N.A., dos Santos Franco, Y.R. *et al.* (2019) Effectiveness of the Pilates method versus aerobic exercises in the treatment of older adults with chronic low back pain: a randomized controlled trial protocol. *BMC Musculoskeletal Disord* 20, 250 (2019). <https://doi.org/10.1186/s12891-019-2642-9>

Abstract

Chronic low back pain is potentially disabling for older adults, and exercise is considered the best treatment. The Pilates method and aerobic exercises have been proven to be effective in pain and function improvement in patients with low back pain, but evidence in the treatment of older adults with low back pain is scarce. Therefore, the objective of this study is to investigate the effectiveness of the Pilates method compared to aerobic exercises in the treatment of older adults with chronic nonspecific low back pain.

Methods: This is a randomized controlled trial with blinded assessor, to be held in a physical therapy clinic in Sao Paulo, Brazil. Seventy-four patients aged 65 to 85 years with chronic nonspecific pain will be randomized into Pilates Group (n = 37) with exercises based on the Pilates method and Aerobic Group (n = 37) with treadmill aerobic exercise. The primary outcomes will be pain intensity and general disability, assessed eight weeks after randomization. The secondary outcomes will be: pain intensity and general disability, assessed six months after randomization; and global perceived improvement, specific disability, dynamic balance, muscle strength (gluteus maximus, gluteus medius, and lateral hip rotators), and pressure pain threshold, assessed eight weeks and six months after randomization. Therapists and patients will not be blinded.

Discussion: This study has the potential to reduce pain and, consequently, improve balance and function of older adults with chronic low back pain with both therapies. However, Pilates may be more effective because the exercises are more targeted to the trunk stabilization muscles. The results of this study may provide valuable information on the effects of Pilates and aerobic exercise in older adults with chronic low back pain and contribute to a better selection of the treatment program according to the patient preference.

Tai Chi

Study

Kong, L. J., Lauche, R., Klose, P., Bu, J. H., Yang, X. C., Guo, C. Q., ... Cheng, Y. W. (2016). Tai Chi for Chronic Pain Conditions: A Systematic Review and Meta-analysis of Randomized Controlled Trials. *Scientific reports*, 6, 25325. doi:10.1038/srep25325

Abstract

Several studies reported that Tai Chi showed potential effects for chronic pain, but its role remains controversial. This review assessed the evidence regarding the effects of Tai Chi for chronic pain conditions. 18 randomized controlled trials were included in our review. The aggregated results have indicated that Tai Chi showed positive evidence on immediate relief of chronic pain from osteoarthritis (standardized mean difference [SMD], -0.54; 95% confidence intervals [CI], -0.77 to -0.30; $P < 0.05$). The valid duration of Tai Chi practice for osteoarthritis may be more than 5 weeks. And there were some beneficial evidences regarding the effects of Tai Chi on immediate relief of chronic pain from low back pain (SMD, -0.81; 95% CI, -1.11 to -0.52; $P < 0.05$) and osteoporosis (SMD, -0.83; 95% CI, -1.37 to -0.28; $P = 0.003$). Therefore, clinicians may consider Tai Chi as a viable complementary and alternative medicine for chronic pain conditions.

Study

Chenchen Wang et al, (2018). Effect of tai chi versus aerobic exercise for fibromyalgia: comparative effectiveness randomized controlled trial. *BMJ* 2018; 360 doi: <https://doi.org/10.1136/bmj.k851>

Abstract

Objectives: To determine the effectiveness of tai chi interventions compared with aerobic exercise, a current core standard treatment in patients with fibromyalgia, and to test whether the effectiveness of tai chi depends on its dosage or duration.

Design: Prospective, randomized, 52-week, single blind comparative effectiveness trial.

Setting Urban tertiary care academic hospital in the United States between March 2012 and September 2016.

Participants: 226 adults with fibromyalgia (as defined by the American College of Rheumatology 1990 and 2010 criteria) were included in the intention to treat analyses: 151 were assigned to one of four tai chi groups and 75 to an aerobic exercise group.

Interventions Participants were randomly assigned to either supervised aerobic exercise (24 weeks, twice weekly) or one of four classic Yang style supervised tai chi interventions (12 or 24 weeks, once or twice weekly). Participants were followed for 52 weeks. Adherence was rigorously encouraged in person and by telephone.

Main outcome measures: the primary outcome was change in the revised fibromyalgia impact questionnaire (FIQR) scores at 24 weeks compared with baseline. Secondary outcomes included changes of scores in patient's global assessment, anxiety, depression, self-efficacy, coping strategies, physical functional performance, functional limitation, sleep, and health related quality of life.

Results: FIQR scores improved in all five treatment groups, but the combined tai chi groups improved statistically significantly more than the aerobic exercise group in FIQR scores at 24 weeks (difference between groups=5.5 points, 95% confidence interval 0.6 to 10.4, $P=0.03$) and several secondary outcomes (patient's global assessment=0.9 points, 0.3 to 1.4, $P=0.005$; anxiety=1.2 points, 0.3 to 2.1, $P=0.006$; self-efficacy=1.0 points, 0.5 to 1.6, $P=0.0004$; and coping strategies, 2.6 points, 0.8 to 4.3, $P=0.005$). Tai chi treatment compared with aerobic exercise administered with the same intensity and duration (24 weeks, twice weekly) had greater benefit (between group difference in FIQR scores=16.2 points, 8.7 to 23.6, $P<0.001$). The groups who received tai chi for 24 weeks showed greater improvements than those who received it for 12 weeks (difference in FIQR scores=9.6 points, 2.6 to 16.6, $P=0.007$). There was no significant increase in benefit for groups who received tai chi twice weekly compared with once weekly. Participants attended the tai chi training sessions more often than participants attended aerobic exercise. The effects of tai chi were consistent across all instructors. No serious adverse events related to the interventions were reported.

Conclusion: Tai chi mind-body treatment results in similar or greater improvement in symptoms than aerobic exercise, the current most commonly prescribed non-drug treatment, for a variety of outcomes for patients with fibromyalgia. Longer duration of tai chi showed greater improvement. This mind-body approach may be considered a therapeutic option in the multidisciplinary management of fibromyalgia.

Yoga

Study

Li Y, Li S, Jiang J, et al. Effects of yoga on patients with chronic nonspecific neck pain. A PRISMA systematic review and meta-analysis. *Medicine*. 2019;98(8): e14649.

Abstract

It was difficult to make a comprehensive summary of all the evidence due to the different session and duration of the yoga interventions, and the different outcome measurement tools in the study, we draw a very cautious conclusion that yoga can relieve neck pain intensity, improve pain-related function disability, increase CROM, improve QoL, and boost mood. This suggests that yoga might be an important alternative in the treatment of CNNP.

Study

Cramer, H., Klohe, P., Brinkhaus, B., Michalsen, A., & Dobos, G. (2017). Effects of yoga on chronic neck pain: a systematic review and meta-analysis. *Clinical Rehabilitation*, 31(11), 1457–1465. <https://doi.org/10.1177/0269215517698735>

Abstract

Objective: The aim of this review was to systematically assess and meta-analyse the effectiveness of yoga in relieving chronic neck pain.

Methods: PubMed/MEDLINE, the Cochrane Library, Scopus, and IndMED were screened through January 2017 for randomized controlled trials assessing neck pain intensity and/or neck pain-related disability in chronic neck pain patients. Secondary outcome measures included quality of life, mood, and safety. Risk of bias was assessed using the Cochrane tool.

Results: Three studies on 188 patients with chronic non-specific neck pain comparing yoga to usual care were included. Two studies had overall low risk of bias; and one had high or unclear risk of bias for several domains. Evidence for short-term effects was found for neck pain intensity (standardized mean difference (SMD) = -1.28; 95% confidence interval (CI) = -1.18, -0.75; P < 0.001), neck pain-related disability (SMD = -0.97; 95% CI = -1.44, -0.50; P < 0.001), quality of life (SMD = 0.57; 95% CI = 0.17, 0.197; P = 0.005), and mood (SMD = -1.02; 95% CI = -1.38, -0.65; P < 0.001). Effects were robust against potential methodological bias and did not differ between different intervention subgroups. In the two studies that included safety data, no serious adverse events occurred.

Conclusion: Yoga has short-term effects on chronic neck pain, its related disability, quality of life, and mood suggesting that yoga might be a good treatment option.

ⁱ Painaustralia (2019). The Cost of Pain in Australia. Deloitte.

ⁱⁱ Cousins MJ, Gallagher RM (2015). Fast facts: Cancer and chronic pain. Abingdon, England Health Press. https://trove.nla.gov.au/work/155140237?q&sort=holdings+desc&_id=1534230194614&versionId=212593017