



ABSTRACTS October 2024

Japanese Clinical Physical Therapists With the Mechanical Diagnosis and Therapy License Are More Competent and Confident in Pain Management Than Those Without It: A Cross-Sectional Study

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Cureus. 2024 Oct 1;16(10):e70652. doi: 10.7759/cureus.70652. eCollection 2024 Oct.

Abstract:

Background The McKenzie Method of Mechanical Diagnosis and Therapy (MDT) has long been misunderstood as a biomedical approach. In fact, it is a biopsychosocial approach with an up-to-date evidence-based educational curriculum. Recently, it has become possible to partially measure competence in clinical decision-making based on contemporary pain understanding and confidence in pain management using the Pain Understanding and Confidence Questionnaire (PUnCQ). The primary aim of this study was to compare the following outcomes between physical therapists with and without credential license in MDT (Cred.MDT) and the PUnCQ as well as attitudes toward the biopsychosocial perspective, adherence to evidence-based management for low back pain (LBP), and knowledge of modern pain science. The secondary aim was to explore relevant factors in the PUnCQ. **Methodology** Clinical physical therapists who were managing patients with pain were recruited from two associations (the Japanese Society of Allied Health and Rehabilitation and the Japan Branch of the International McKenzie Institute, who had all acquired at least the Cred.MDT). The following outcomes were measured: (1) the PUnCQ-1 for partial competence in evidence-based clinical decision-making for pain management; (2) part 2 scores of the PUnCQ for confidence in pain management; (3) the Pain Attitudes and Beliefs Scale for Physical Therapists (PABS-PT) biopsychosocial/biomedical ratio for treatment perspectives; (4) the Knowledge and Attitudes of Pain (KNAP) for knowledge of modern pain science; and (5) a questionnaire for adherence to LBP practice guidelines. Two group comparisons were conducted for the primary aim and a multiple regression analysis for the independent variable

of the PUnCQ-1 was conducted for the secondary aim. Results Data from 122 physical therapists (63 and 59 participants with and without the Cred.MDT, respectively) were analyzed. Statistically significantly higher scores were detected for physical therapists with Cred.MDT compared to those without (all $p < 0.05$) for all of the above outcomes. The multiple regression analysis demonstrated that statistically significant contributors to the PUnCQ-1 were part 2 scores of the PUnCQ for the pain management factor ($p = 0.016$) and acquisition of the Cred.MDT ($p = 0.038$) ($R^2 = 0.12$). Conclusion Competence and confidence in pain management, attitudes toward biopsychosocial approaches, knowledge of modern pain science and guideline adherence are higher in physical therapists with the Cred.MDT than those without it. Confidence in pain management and acquisition of the Cred.MDT contributed to competence in evidence-based clinical decision-making for pain management.

The impact of contextual effects in exercise therapy for low back pain: a systematic review and meta-analysis

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BMC Med. 2024 Oct 23;22(1):484. doi: 10.1186/s12916-024-03679-3.

Abstract:

Background: Low back pain is the leading cause of global disability for which exercise therapy is a widely recommended treatment. Research indicates that contextual factors may also influence treatment outcomes in low back pain. Examples include the patient-therapist relationship and other treatment-related circumstances that affect patient expectations. By focusing on the specific treatment effect, clinical trials often ignore the effect of contextual factors, thereby contributing to the so-called efficacy paradox. This means that treatment effects observed in clinical practice are often greater than those reported in clinical trials. This systematic review aims to investigate the proportion of improvement in pain and disability that can be attributed to contextual effects in the outcome of exercise therapy for patients with low back pain.

Methods: A meta-analysis was conducted. PubMed, Embase, and the Cochrane database were searched for eligible articles reporting randomized controlled trials that compared exercise therapy to placebo interventions. Risk of bias was assessed with the Revised Cochrane Risk of Bias Tool. Outcomes of interest were pain and disability. Meta-analysis was carried out to calculate the proportion attributable to contextual effects for



both pain and disability. The body of evidence was assessed using the GRADE methodology.

Results: Eight studies met the inclusion criteria and were included in the meta-analysis. Five studies were rated as having a moderate risk of bias and two studies had a low risk of bias. Proportion attributable to contextual effects was 0.60 (95% CI 0.40-0.89) for pain and 0.69 (95% CI 0.48-1.00) for disability. Certainty of the evidence as assessed with the GRADE methodology was low.

Conclusions: A large extent of pain and disability improvement after exercise therapy in low back pain is attributable to contextual effects although this conclusion is based on low certainty evidence.

Does sedentary behaviour cause spinal pain in children and adolescents? A systematic review with meta-analysis

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British Journal of Sports Medicine 2024 Oct 22:bjsports-2024-108648.
doi: 10.1136/bjsports-2024-108648. Online ahead of print.

Abstract:

Objective: To evaluate whether sedentary behaviour is a risk or prognostic factor for spinal pain in children and adolescents. Specifically, to estimate the (1) direction and strength of the association; (2) risk of spinal pain onset and (3) effect on spinal pain prognosis.

Design: Systematic review with meta-analysis.

Data sources: Electronic searches of MEDLINE, Embase, CINAHL and Web of Science up to 23 March 2023.

Eligibility criteria for selecting studies: Reports estimating the effect of sedentary behaviour on spinal pain in young people (≤ 19 years).

Results: We included 129 reports, 14 were longitudinal ($n = 8\ 433$) and 115 were cross-sectional ($n > 697\ 590$). We incorporated 86 studies into meta-analyses. (1) From cross-sectional data, we found low certainty evidence of a small positive association between sedentary behaviour and spinal pain (adjusted odds ratio 1.25 (95% CI 1.17 to 1.33), $k = 44$, $n > 92\ 617$). (2) From longitudinal data, we found low certainty evidence of no increased risk for the onset of spinal pain due to sedentary behaviour (adjusted risk ratio 1.07 (95% CI 0.84 to 1.35), $k = 4$, $n = 1\ 292$). (3) No studies assessed prognosis.



Conclusion: Cross-sectional data suggest minimally higher odds of spinal pain for children and adolescents who engage in greater sedentary behaviours. However, longitudinal data do not support a causal relationship, indicating that sedentary behaviour does not increase the risk for onset of spinal pain. Due to the low certainty of evidence, these findings must be interpreted with caution. We found no evidence of the effect sedentary behaviour has on spinal pain prognosis in children and adolescents, highlighting a considerable gap in the literature.

How much does an MRI change over a period of up to 2 years in patients with chronic low back pain? Is a repeated MRI really necessary in the follow-up of patients with chronic low back pain?

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European Spine Journal 2024 Oct 11.

doi: 10.1007/s00586-024-08416-1. Online ahead of print.

Abstract:

Purpose: Clinical practices vary between healthcare providers when it comes to asking for a Magnetic Resonance Imaging (MRI) during follow-up for chronic low-back pain (LBP). The association between progressive changes on the MRI and the clinical relevance of these findings is not clearly defined. The objective of our study is to investigate to what extent do MRI findings change during a period less than or equal to two years in patients with chronic LBP. We question the efficacy of its routinary use as a tool for follow-up and we also study the correlation between new changes on MRI and modifications in therapeutic attitude.

Methods: Data was collected from 468 lumbar spine MRIs from 209 patients undergoing two or more MRIs between January 2015 and December 2019 with a mean of 2.24 MRIs per patient. The evaluated data included diagnosis, reason for request, MRI findings and treatment offered post-MRI. MRIs were assessed according to a standardized scoring system from 0 to 14 points according to the severity in findings (modified Babinska Score). Radiological changes were defined as increased severity of findings in the most affected segment.



Results: 51.06% of MRI requests had no documented reason to be asked for. The average score of the findings on the first MRI was 5,733 (SD 2,462) and 6,131 (SD 2,376) on the second, not reaching a statistically significant difference ($p = 0.062$). There was no difference on the findings between the first and the second MRI in 40, 15% ($n = 104$) and up to 89, 96% with only mild changes (-1/ + 2 points over 14 possibles). After repeating the MRI, no modification to the treatment plan was made in 44, 79% of patients ($n = 116$) and only in 11.58% ($n = 30$) was surgical treatment indicated.

Conclusion: The rate of lumbar MRI has risen to an alarming pace without evidence of consequent improvements in patient outcomes. A significant number of repeated MRIs did not show radiological changes, nor did they give rise to further surgical treatment after obtaining these images. This study should help to review the real applications of clinical guides on the appropriate use for image tests.

Open-Label Placebo Injection for Chronic Back Pain With Functional Neuroimaging: A Randomized Clinical Trial

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Jama Network Open. 2024 Sep 3;7(9):e2432427.

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Abstract:

Importance: Chronic back pain (CBP) is a leading cause of disability. Placebo treatments often provide as much pain relief as bona fide treatments, such as steroid injections. Open-label (honestly prescribed) placebos (OLPs) may relieve CBP without deception, but OLP mechanisms remain poorly understood.

Objective: To investigate the long-term efficacy and neurobiological mechanisms of OLP for CBP.

Design, setting, and participants: A randomized clinical trial of CBP with longitudinal functional magnetic resonance imaging (MRI) comparing OLP with usual care, with 1-year follow-up, was conducted in a university research setting and a community orthopedic clinic. Participants were individuals aged 21 to 70 years with CBP. The trial was conducted from November 2017 to August 2018, with 1-year follow-up completed by November 2019. Data analysis was performed from April 2020 to May 2024. The primary analysis was conducted on an intention-to-treat sample.



Interventions: Participants randomized to OLP received a 1-time subcutaneous lumbar saline injection presented as placebo accompanied by information about the power of placebo to relieve pain, alongside their ongoing care. Usual care participants continued their ongoing care.

Main outcomes and measures: The primary outcome was pain intensity (0-10, with 0 indicating no pain and 10 the most intense) at 1 month posttreatment. Secondary outcomes included pain interference, depression, anxiety, anger, and sleep quality. Functional MRI was performed before and after treatment during evoked and spontaneous back pain.

Results: A total of 101 adults (52 [51.4%] females; mean [SD] age, 40.4 [15.4] years) with moderate severity CBP (mean [SD], 4.10 [1.25] intensity; duration, 9.7 [8.5] years) were enrolled. Compared with usual care, OLP reduced CBP intensity posttreatment (relative reduction, 0.61; Hedges $g = 0.45$; 95% CI, -0.89 to 0.04; $P = .02$). Through 1-year follow-up, pain relief did not persist, although significant benefits were observed for depression, anger, anxiety, and sleep disruption (Hedges $g = 0.3-0.5$; all $P < .03$). Brain responses to evoked back pain for OLP vs usual care increased in rostral anterior cingulate and ventromedial prefrontal cortex and decreased in somatomotor cortices and thalamus. During spontaneous pain, functional connectivity analyses identified OLP vs usual care increases in ventromedial prefrontal cortex connectivity to the rostral ventral medulla, a pain-modulatory brainstem nucleus. No adverse effects of treatment were reported by participants.

Conclusions and relevance: In this randomized clinical trial of OLP vs usual care, a single nondeceptive placebo injection reduced CBP intensity for 1 month posttreatment and provided benefits lasting for at least 1 year posttreatment. Brain mechanisms of OLP in a clinical population overlap with those of deceptive placebos in healthy volunteers, including engagement of prefrontal-brainstem pain modulatory pathways.



Incidence of and risk factors for lumbar disc herniation with radiculopathy in adults: a systematic review

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European Spine Journal 2024 Oct 25.

doi: 10.1007/s00586-024-08528-8. Online ahead of print.

Abstract:

Background: Lumbar disc herniation (LDH) with radiculopathy is associated with greater pain, disability, healthcare use, and costs compared with nonspecific low back pain. Reliable information about its incidence and risk factors were lacking.

Questions: (1) What is the incidence of lumbar disc herniation (LDH) with radiculopathy in adults? (2) What are the risk factors for LDH with radiculopathy in adults?

Methods: Systematic review. We searched five electronic databases from 1970 to September 2023. Eligible cohort and case-control studies were identified and independently assessed for risk of bias. A qualitative best evidence synthesis of low and moderate risk of bias studies was conducted.

Results: We critically reviewed 87 studies and synthesised data from 59 (68%) studies; 12 were of low and 47 of moderate risk of bias. The lower and upper bound limits of the 95% CIs of annual incidence estimates ranged from 0.3 to 2.7 per 1000 persons for surgical case definitions, from 0.04 to 1.5 per 1,000 persons for hospital-based case definitions, and from 0.1 to 298.3 per 1,000 persons for clinical case definitions. Factors associated with the development of LDH with radiculopathy included middle-age (30-50 years), smoking, higher BMI, presence of cardiovascular risk factors (in women), and greater cumulative occupational lumbar load by forward bending postures and manual materials handling, with effect sizes ranging from ranging from 1.1 (1.0-1.3) to 3.7 (2.3-6.0).

Conclusions: Incidence of LDH varies in different populations and according to case definition. Risk factors include individual, behavioural, and work-related variables. Our findings support the need to develop standardised case definitions that validly classify the clinical spectrum of LDH and for future low risk of bias studies examining causal relationships for LDH with radiculopathy in adults.



The McKenzie Method delivered by credentialed therapists for chronic low back pain with directional preference: systematic review with meta-analysis

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doi: 10.1080/10669817.2024.2408084. Online ahead of print.

Abstract:

Objective: To determine the effectiveness of the McKenzie Method compared to any conservative interventions on pain and disability in patients with chronic low back pain (LBP) with directional preference (DP).

Methods: We searched six electronic databases up to September 2022. Eligible randomized controlled trials were those assessing the McKenzie Method delivered by credentialed therapists for chronic LBP with DP. Two reviewers independently selected studies, extracted data, assessed risk of bias with the revised Cochrane Risk of Bias 2.0 tool and certainty of evidence with the Grading of Recommendations Assessment, Development and Evaluation (GRADE) framework.

Results: Five trials ($n = 743$) were included. There was low-certainty evidence that the McKenzie Method, compared to all other interventions combined, produced clinically important reductions in short-term pain (mean difference [MD] -1.11 points on a 10-point scale; 95% CI -1.83 to -0.40) and in intermediate-term disability (standardized mean difference [SMD] -0.53; 95% CI -0.97 to -0.09). Low-to-moderate certainty evidence showed that the McKenzie Method also resulted in clinically important improvements in short-term pain (MD -1.53; 95% CI -2.51 to -0.54) and disability (SMD -0.50; 95% CI -0.74 to -0.25) when compared specifically to other exercise approaches, and in intermediate-term pain (MD -2.10; 95% CI -2.94 to -1.26) and disability (SMD -1.01; 95% CI -1.58 to -0.43) as well as long-term disability (SMD -0.59; 95% CI -1.14 to -0.03) when compared to minimal intervention. Low-certainty evidence showed usually small, clinically unimportant effects in comparison to manual therapy.

Conclusion: We found low-to-moderate certainty evidence that the McKenzie Method was superior to all other interventions combined for up to 6 months for pain and up to 12 months for disability, with clinically important differences versus exercise in the short term and versus minimal interventions in the intermediate term. The only clinically important long-term effect was on disability compared to minimal intervention.



Effectiveness of Exercise Interventions for Preventing Neck Pain: A Systematic Review With Meta-analysis of Randomized Controlled Trials

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Journal of Orthopaedic and Sports Physical Therapy. 2023 Oct;53(10):594–609.

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Abstract:

OBJECTIVE: To update the evidence on the effectiveness of exercise interventions to prevent episodes of neck pain.

DESIGN: Systematic review with meta-analysis.

LITERATURE SEARCH: MEDLINE, Embase, CENTRAL, CINAHL, SPORTDiscus, PEDro, and trial registries from inception to December 2, 2022. Forward and backward citation searches.

STUDY SELECTION CRITERIA: Randomized controlled trials (RCTs) that enrolled adults without neck pain at baseline and compared exercise interventions to no intervention, placebo/sham, attention control, or minimal intervention. Military populations and astronauts were excluded.

DATA SYNTHESIS: Random-effects meta-analysis. Risk of bias was assessed using the Cochrane RoB 2 tool. The certainty of evidence was judged according to the GRADE approach.

RESULTS: Of 4703 records screened, 5 trials (1722 participants at baseline) were included and eligible for meta-analysis. Most (80%) participants were office workers. Risk of bias was rated as some concerns for 2 trials and high for 3 trials. There was moderate-certainty evidence that exercise interventions probably reduce the risk of a new episode of neck pain (OR, 0.49; 95% confidence interval: 0.31, 0.76) compared to no or minimal intervention in the short-term (≤ 12 months). The results were not robust to sensitivity analyses for missing outcome data.

CONCLUSION: There was moderate-certainty evidence supporting exercise interventions for reducing the risk for an episode of neck pain in the next 12 months. The clinical significance of the effect is unclear.



Prognostic factors of pain, disability, and poor outcomes in persons with neck pain - an umbrella review

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Clinical Rehabilitation. 2024 Oct 3:2692155241268373.

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Abstract:

Objective: The aim of this study was to identify prognostic factors pertaining to neck pain from systematic reviews.

Data sources: A search on PubMed, Scopus, and CINAHL was performed on June 27, 2024. Additional grey literature searches were performed.

Review methods: We conducted an umbrella review and included systematic reviews reporting the prognostic factors associated with non-specific or trauma-related neck pain and cervical radiculopathy. Prognostic factors were sorted according to the outcome predicted, the direction of the predicted outcome (worse, better, inconsistent), and the grade of evidence (Oxford Center of Evidence). The predicted outcomes were regrouped into five categories: pain, disability, work-related outcomes, quality of life, and poor outcomes (as "recovery"). Risk of bias analysis was performed with the ROBIS tool.

Results: We retrieved 884 citations from three databases, read 39 full texts, and included 16 studies that met all selection criteria. From these studies, we extracted 44 prognostic factors restricted to non-specific neck pain, 47 for trauma-related neck pain, and one for cervical radiculopathy. We observed that among the prognostic factors, most were associated with characteristics of the condition, cognitive-emotional factors, or socio-environmental and lifestyle factors.

Conclusion: This study identified over 40 prognostic factors associated mainly with non-specific neck pain or trauma-related neck pain. We found that a majority were associated with worse outcomes and pertained to domains mainly involving cognitive-emotional factors, socio-environmental and lifestyle factors, and the characteristics of the condition to predict outcomes and potentially guide clinicians to tailor their interventions for people living with neck pain.



Persistence, not avoidance, is associated with low back pain-An observational cohort study

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European Journal of Pain. 2024 Sep 30.

doi: 10.1002/ejp.4728. Online ahead of print.

Abstract:

Background: Low back pain (LBP) is increasingly understood as a long-lasting condition with a variable course. Avoidance and persistence behaviour have been described to mediate pain persistence by potentially linking psychosocial factors and biomechanics. The resulting maladaptive changes in musculoskeletal structures can result in movement control impairment (MCI). This investigation aimed to observe avoidance and persistence behaviour and MCI in participants with acute LBP over 1 year and explore their association with pain persistence.

Methods: In this observational cohort study, 165 participants were assessed at five time points: ≤ 1 month (baseline), 2, 3, 6, and 12 months after the onset of acute LBP. Simultaneously collected clinical data such as self-reported outcomes at baseline for avoidance and persistence and assessments of MCI were fitted in linear mixed-effects regression models.

Results: The mixed-effects analysis revealed for the adjusted model that a one-point increase in persistence scores resulted in a 3.31-point increase in pain intensity while interacting with state anxiety over time ($p = 0.05$, 95% confidence interval 0.07-6.07). This effect was not found for avoidance behaviour at baseline ($p = 0.21$) and MCI.

Conclusions: The relationship between persistence and pain intensity throughout measurement suggests that continuing usual activities beyond pain, coupled with feelings of distress, may lead to persistent LBP. These results underscore the need for a therapeutic shift toward a multidimensional approach that considers the physical and psychological characteristics of persons with LBP. Screening for activity patterns in acute LBP is critical for providing tailored treatment and counselling.

Significance statement: In acute low back pain (LBP), maintaining usual activities despite pain and distress can contribute to the continuation of LBP. Alongside a multidimensional approach that considers physical and psychological factors, attitudes toward daily activities are also important. Screening for both maladaptive and adaptive activity patterns in individuals with acute LBP is essential for effective LBP management, improving patient outcomes, and preventing persistent pain.



The importance of context (placebo effects) in conservative interventions for musculoskeletal pain: A systematic review and meta-analysis of randomized controlled trials

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European Journal of Pain. 2024 May;28(5):675-704.

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Abstract:

Background and objective: Contextual effects (e.g. patient expectations) may play a role in treatment effectiveness. This study aimed to estimate the magnitude of contextual effects for conservative, non-pharmacological interventions for musculoskeletal pain conditions. A systematic review and meta-analysis of randomized controlled trials (RCTs) that compared placebo conservative non-pharmacological interventions to no treatment for musculoskeletal pain. The outcomes assessed included pain intensity, physical functioning, health-related quality of life, global rating of change, depression, anxiety and sleep at immediate, short-, medium- and/or long-term follow-up.

Databases and data treatment: MEDLINE, EMBASE, CINAHL, Web of Science Core Collection, CENTRAL and SPORTDiscus were searched from inception to September 2021. Trial registry searches, backward and forward citation tracking and searches for prior systematic reviews were completed. The Cochrane risk of bias 2 tool was implemented.

Results: The study included 64 RCTs (N = 4314) out of 8898 records. For pain intensity, a mean difference of (MD: -5.32, 95% confidence interval (CI): -7.20, -3.44, N = 57 studies with 74 outcomes, GRADE: very low) was estimated for placebo interventions. A small effect in favour of the placebo interventions for physical function was estimated (SMD: -0.22, 95% CI: -0.35, -0.09; N = 37 with 48 outcomes, GRADE: very low). Similar results were found for a broad range of patient-reported outcomes. Meta-regression analyses did not explain heterogeneity among analyses.

Conclusion: The study found that the contextual effect of non-pharmacological conservative interventions for musculoskeletal conditions is likely to be small. However, given the known effect sizes of recommended evidence-based treatments for musculoskeletal conditions, it may still contribute an important component.

Significance: Contextual effects of non-pharmacological conservative interventions for musculoskeletal conditions are likely to be small for a



broad range of patient-reported outcomes (pain intensity, physical function, quality of life, global rating of change and depression). Contextual effects are unlikely, in isolation, to offer much clinical care. But these factors do have relevance in an overall treatment context as they provide almost 30% of the minimally clinically important difference.

Predictive validity of the STarT Back screening tool among older adults with back pain

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European Journal of Pain. 2024 May 16.

doi: 10.1002/ejp.2281. Online ahead of print.

Abstract:

Background: The predictive validity of the STarT Back screening tool among older adults is uncertain. This study aimed to assess the predictive validity of the SBT among older adults in primary care.

Methods: This prospective cohort study included 452 patients aged ≥ 55 years seeking Norwegian primary care with a new episode of back pain. A poor outcome (persistent disabling back pain) was defined as a score of $\geq 7/24$ on the Roland-Morris Disability Questionnaire (RMDQ) at 3, 6 or 12 months of follow-up. The ability of the SBT risk groups to identify persistent disabling back pain was assessed with multivariable logistic regression, area under receiver operating characteristics curve (AUC), and with the accuracy measures sensitivity, specificity, predictive values and likelihood ratios.

Results: The adjusted odds ratios (95% CI) for persistent disabling back pain were 2.40 (1.34-4.30) at 3 months, 3.42 (1.76-6.67) at 6 months and 2.81 (1.47-5.38) at 12 months for the medium-risk group ($n = 118$), and 8.90 (1.83-43.24), 2.66 (0.81-8.67) and 4.53 (1.24-16.46) for the high-risk group ($n = 27$), compared to the low-risk group ($n = 282$). There were no statistically significant differences in odds between the medium- and high-risk groups at any time point. AUC values (95% CI) were 0.65 (0.59-0.71), 0.67 (0.60-0.73) and 0.65 (0.58-0.71) at 3, 6 and 12 months. Accuracy measures were poor at all time points, with particularly poor sensitivity and negative likelihood ratio values.

Conclusion: The predictive validity of the SBT risk groups in predicting persistent disabling back pain in older adults was poor.



Significance statement: This study found that the STarT Back screening tool had poor predictive validity among older adults and that it may need recalibration or extension before widespread implementation among older adults. Having valid tools for this population may aid clinicians with allocating scarce healthcare resources, which is especially important considering the rapidly ageing population and its expected challenge to the healthcare systems.

A critical review of the role of manual therapy in the treatment of individuals with low back pain

Jean-Pascal Grenier, Maria Rothmund

Journal of Manual & Manipulative Therapy. 2024 Oct;32(5):464-477.

doi: 10.1080/10669817.2024.2316393.

Abstract:

The number of low back pain (LBP) cases is projected to increase to more than 800 million by 2050. To address the substantial burden of disease associated with this rise in prevalence, effective treatments are needed. While clinical practice guidelines (CPG) consistently recommend non-pharmacological therapies as first-line treatments, recommendations regarding manual therapy (MT) in treating low back pain vary. The goal of this narrative review was to critically summarize the available evidence for MT behind these recommendations, to scrutinize its mechanisms of action, and propose some actionable steps for clinicians on how this knowledge can be integrated into a person-centered approach. Despite disparate recommendations from CPG, MT is as effective as other available treatments and may be offered to patients with LBP, especially as part of a treatment package with exercise and education. Most of the effects of MT are not specific to the technique. MT and other interventions share several mechanisms of action that mediate treatment success. These mechanisms can encompass patients' expectations, prior experiences, beliefs and convictions, epistemic trust, and nonspecific contextual effects. Although MT is safer than opioids for patients with LBP, this alone is insufficient. Our goal is to encourage clinicians to shift away from outdated and refuted ideas in MT and embrace a person-centered approach rooted in a comprehensive biopsychosocial framework while incorporating patients' beliefs, addressing illness behaviors, and seeking to understand each patient's journey.



