# WHAT IS THE EFFECTIVENESS OF MANUAL THERAPY IN PEOPLE WITH UPPER BACK PAIN - A SCOPING REVIEW



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## INTRODUCTION

Upper back pain (UBP), often referred to as thoracic spine pain, is a prevalent musculoskeletal condition with significant implications for individuals' quality of life. Manual therapy (MT) techniques are commonly used by physiotherapists and osteopaths to manage upper back pain. However, the efficacy of such interventions has not been investigated.

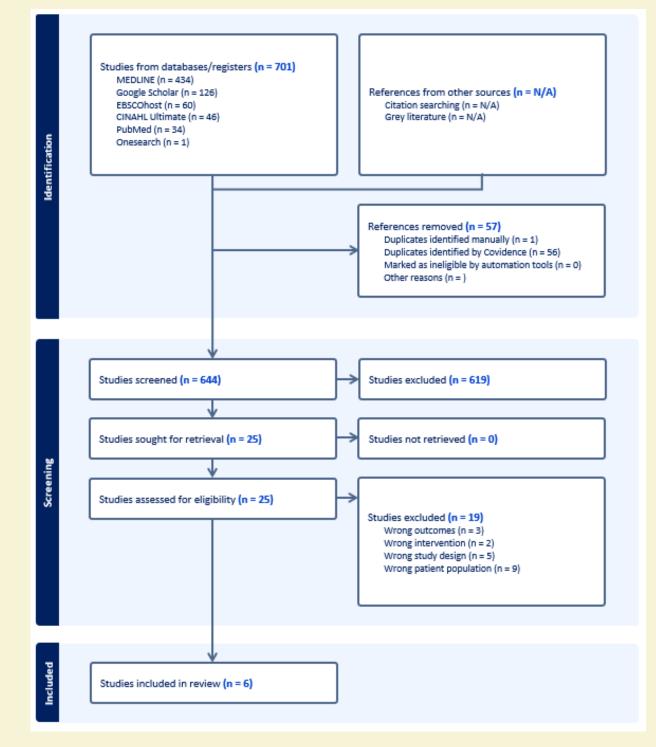
#### OBJECTIVE

The objective of this study is to determine the effectiveness of manual therapy techniques for long and short-term management of upper back pain.

#### **METHODOLOGY**

A systematic search was conducted across multiple electronic databases, including PubMed, Onesearch, EbscoHost, CINAHL Ultimate, Medline, and Google Scholar from 2000 to 2023. Three reviewers were involved at each stage to ensure the efficacy and reliability of the review process. A JBI critical appraisal tool was utilized to evaluate the risk of bias in included studies. Inclusion criteria for to studies included; peer reviewed articles, articles between 2000-2023, and articles that used Numeric Pain Rating Scale or Visual Analogue Scale.

# **Prisma Flow Diagram**



#### RESULTS

#### DISCUSSION

Six studies (295 participants) that met our criteria (four RCTs and two case reports) were included. Our review found evidence that MT interventions may have positive effects in terms of reduced pain, improved function and quality of life in the short term.

# **RISK OF BIAS**

Studies	(Bennell et al., 2010)	(Crothers et al., 2016)	(Muhammad Sharif Waqas et al., 2023)	(Schiller, 2001)
Random sequence Generation	+	+	+	+
Allocation concealment	+	+	+	-
Blinding of participants and personnel	+	+	+	+
Blinding of Outcomes Assessment	?	-	?	-
Incomplete Data Outcome	+	+	+	+
Selective reporting	+	+	+	?
Risk of Bias	Low Risk	Moderate Risk	Low Risk	Serious Risk

# CONCLUSION

The use of spinal manipulation therapy, massage, and mobilization for the management of upper back pain is appropriate when used in conjunction with other treatments and management strategies. Especially with symptom management during the first 2 weeks.

Further and more in-depth longitudinal study around the long-term response of manual therapy for upper back pain is required to develop better treatment protocols for long-term solutions. The findings suggest that MT may positively impact people with UBP. However, this is based on a small number of studies. Hence, more research is required to clarify our review findings, especially in the long term. The nature of placebo and/or control interventions in MT studies may also be an area of further research in this cohort.

# **INTERVENTION COMPARISON**

Study	Intervention group (n)	Pain	Functional improvement	Mental/Socia
(Bennell et al., 2010)	Home Exercise prescription, Taping, Massage, vertebral mobilisation	+	+	+
(Crothers et al., 2016)	SMT Graston Technique (Instrument- assisted massage).	N/D	N/D	N/A
(Muhammad Sharif Waqas et al., 2023)	SMT	+	+	+
(Schiller, 2001)	manual thrust chiropractic adjustment/ SMT	+	+	N/A
(Kelley & Whitney, 2006)	Thoracic non-thrust manipulative technique, Exercise Perscription	+	N/A	N/A N/A
(McRae & Cleland, 2003)	Ischaemic compression (trigger point release)	+	N/A	N/A

# QUESTIONS

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