Hall H, Cramer H, Sundberg T, Ward L, Adams J, Moore C, Sibbritt D, Lauche R

**The Effectiveness of Complementary Manual Therapies for Pregnancy-Related Back and Pelvic Pain**

**Paper Reviewer:** Aria Mathew

**Affiliations**: Duke University School of Medicine, Doctor of Physical Therapy Division

**Study Design:** Systematic Review with Meta-Analysis

**Abstract**:

Objective: The aim of this systematically review was to critically appraise and synthesize the best available evidence regarding the effectiveness of manual therapies for managing pregnancy-related low back and pelvic pain.

Methods: Seven databases were searched from their inception until April 2015 for randomized controlled trials. Studies investigating the effectiveness of massage and chiropractic and osteopathic therapies were included. The study population was pregnant women of any age and at any time during the antenatal period. Study selection, data extraction, and assessment of risk of bias were conducted by 2 reviewers independently, using the Cochrane tool. Separate meta-analyses were conducted to compare manual therapies to different control interventions.

Results: Out of 348 nonduplicate records, 11 articles reporting on 10 studies on a total of 1198 pregnant women were included in this meta-analysis. The therapeutic interventions predominantly involved massage and osteopathic manipulative therapy. Meta-analyses found positive effects for manual therapy on pain intensity when compared to usual care and relaxation but not when compared to sham interventions. Acceptability did not differ between manual therapy and usual care or sham interventions.

Conclusions: There is currently limited evidence to support the use of complementary manual therapies as an option for managing low back and pelvic pain during pregnancy. Considering the lack of effect compared to sham interventions, further high-quality research is needed to determine causal effects, the influence of the therapist on the perceived effectiveness of treatments, and adequate dose–response of complementary manual therapies on low back and pelvic pain outcomes during pregnancy.

**NIH Risk of Bias Score**: 8/8 (Low risk of bias)

**Key Findings of the Study**:

1. Results from the systematic review indicated a moderate effect of manual therapies for decreasing pain in comparison to usual care and relaxation, however, there were no positive effects for manual therapies in decreasing pain when compared to sham interventions.
2. Positive results were found with craniosacral techniques and osteopathy in decreasing pain disability, which is consistent with findings in a recent Cochrane review.
3. The process of having an intervention conducted on the individual (versus a self-conducted intervention) may have influenced the perceived effectiveness of the treatment, suggesting a “practitioner effect”.

**Reviewer Summary**: After reviewing the results included in the meta-analysis, there does seem to be a positive effect of manual therapy on pain intensity in pregnant women. However, it is uncertain if these results are due to the “practitioner effect” or the specific intervention itself. For example, when comparing manual therapies with sham interventions, pain reduction was similar, suggesting the importance of therapeutic activities regardless of type. Few adverse effects of manual therapy were reported. Due to the safety and effectiveness in treating low back pain and pelvic girdle pain in pregnant women, manual therapy is recommended.

**Clinical Implication**: Because of its effectiveness in decreasing low back and pelvic pain, manual therapy is a recommended option when treating pregnant women. The therapist should be aware that these results could be due to the “practitioner effect” versus the effectiveness of the specific intervention itself. Therapists should evaluate the need for manual therapy and assess each patient’s needs on an individual basis.