

**Outcomes of Pregnant Patients with Low Back Pain Undergoing  
Chiropractic Treatment:  
A Prospective Cohort Study with Short Term, Medium Term and 1-Year  
Follow-up**

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Cynthia K Peterson, Daniel Muhlemann and Barry Kim Humphreys

**KEY POINTS FROM THIS STUDY**

- 1) Low back pain in pregnancy is common. "Low back and pelvic pain in pregnant women is such a common phenomenon that it is often considered a normal part of the pregnancy."
- 2) The theories of etiology for pregnancy low back pain include:
  - Biomechanical changes due to the enlarging uterus resulting in an increasing lumbar lordosis
  - The influence of the hormone relaxin on stabilizing ligaments leading to hypermobility of joints
- 3) The 115 patients in this study were assessed with the numerical rating scale (NRS) and Oswestry low back questionnaire. Assessments were made at baseline and at 1 week, 1 month, 3 months, 6 months, and 1 year after the start of treatment.
- 4) Results:
  - 52% of the patients were improved at 1 week
  - 70% of the patients were improved at 1 month
  - 85% of the patients were improved at 3 months
  - 90% of the patients were improved at 6 months
- 5) "There were significant reductions in NRS and Oswestry scores." "Statistically significant reductions in NRS and Oswestry scores at all follow-up time points compared to the baseline scores was also noted."
- 6) "Most pregnant patients undergoing chiropractic treatment reported clinically relevant improvement at all time points."
- 7) The use of medication to treat pregnancy-related low back pain "is strongly discouraged."
- 8) It is probable that the chiropractic technique used to treat these pregnant patients was Diversified, which utilized high velocity, low amplitude spinal manipulative therapy (SMT).

- 9) "Over half of the patients reported clinically relevant improvement at 1 week, with the vast majority improved at all subsequent data collection time points."
- 10) "At 1 year, 85.2% of patients (n = 98) were 'very happy' or 'happy' with their chiropractic treatment and 6% (n = 7) were 'unhappy'."
- 11) "The results of this current study showed that a high proportion of pregnant patients with LBP undergoing chiropractic treatment reported clinically relevant improvement."
- 12) "No serious adverse events were reported in this study and over 85% of the patients were happy or very happy with their chiropractic treatment."
- 13) "Adverse events from spinal manipulation to pregnant women or those in the early post-partum period are very rare with only 7 cases found in the literature." [and some of these were cervical spine and/or treated by physical therapists]
- 14) "A large proportion of pregnant patients with LBP or pelvic pain undergoing chiropractic treatment report clinically relevant improvement in their symptoms at all time points up to 1 year."

COMMENTS FROM DAN MURPHY:

This is our 4<sup>th</sup> Article Review specifically looking at the values of manipulative/manual therapy in the treatment of pregnant women:

**Article Review #13-14:**

A randomized controlled trial comparing a multimodal intervention and standard obstetrics care for low back and pelvic pain in pregnancy  
*American Journal of Obstetrics & Gynecology; 2013*

**Article Review #14-14:**

Osteopathic Manipulative Treatment in Pregnant Women  
*Journal of the American Osteopathic Association; 2012*

**Article Review #15-14:**

Optimizing pain relief during pregnancy using manual therapy  
*Canadian Family Physician; 2013*