

# Pregnancy and Back Pain

## Annotated References-Pregnancy and Back Pain

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**Olsson C, Buer N, Holm K, Nilsson-Wikmar L. Lumbopelvic pain associated with catastrophizing and fear-avoidance beliefs in early pregnancy. Acta Obstet Gynecol Scand. 2009 Feb 24;1-8.**

Pregnant women with LP had significantly ( $p<0.05$ ) higher levels of exaggerated negative thoughts and fear-avoidance beliefs. They also had lower physical ability and health-related quality of life compared to women in the NLP group. Conclusions. It is important to consider exaggerated negative thoughts about pain experiences and fear-avoidance beliefs when treating women with LP during pregnancy and to be aware of the great impact lumbopelvic pain has on women's lives during early pregnancy.

**Mens JM, Pool-Goudzwaard A, Stam HJ.. Mobility of the pelvic joints in pregnancy-related lumbopelvic pain: a systematic review. Obstet Gynecol Surv. 2009 Mar;64(3):200-8.**

About 45% of all pregnant women and 25% of all women postpartum suffer from pelvic girdle pain and/or low back pain (PLPP). It has been suggested that increased motion of the three joints in the pelvic ring is one of the causes of PLPP. The findings of the study support the idea that enlarged motion is one of the factors that causes PLPP and justifies treatment with measures to reduce this motion.

**Field T, Figueiredo B, Hernandez-Reif M, Diego M, Deeds O, Ascencio A. Massage therapy reduces pain in pregnant women, alleviates prenatal depression in both parents and improves their relationships. J Bodyw Mov Ther. 2008 Apr;12(2):146-50.**

Self-reported leg pain, back pain, depression, anxiety and anger decreased more for the massaged pregnant women than for the control group women.

**Garras DN, Carothers JT, Olson SA. Single-leg-stance (flamingo) radiographs to assess pelvic instability: how much motion is normal? J Bone Joint Surg Am. 2008 Oct;90(10):2114-8.**

The use of anteroposterior pelvic radiographs made with the subject alternating between right and left single-leg stance demonstrated, with high interobserver reliability, that multiparous women had a significantly different physiologic range of pubic translation as compared with men and nulliparous women. The ranges of physiologic motion at the pubic symphysis measured on the single-leg-stance radiographs in this study can be used to identify pathologic amounts of motion at this site. This investigation suggests that up to 5 mm of physiologic motion can occur at the pubic symphysis in asymptomatic individuals, as demonstrated by alternating-single-leg-stance radiographs.

**Tzeng YL, Su TJ. Low back pain during labor and related factors. J Nurs Res. 2008 Sep;16(3):231-41**

Massage was chosen as the most effective intervention to alleviate low back pain by 65.3% of women. The women in labor who suffered from low back pain during pregnancy (OR = 3.23;  $p < .01$ ) and had greater body weight when hospitalized (OR = 1.13;  $p = .02$ ) were most likely to be in the low back pain group. In conclusion, our study demonstrates low back pain intensified with the progression of labor, suggesting early prevention is necessary, especially in the case of women who had low back pain during pregnancy and heavier body weight when hospitalized.

**Stuber KJ, Smith DL. Chiropractic treatment of pregnancy-related low back pain: a systematic review of the evidence. J Manipulative Physiol Ther. 2008 Jul-Aug;31(6):447-54.**

Results from the 6 included studies showed that chiropractic care is associated with improved outcomes in pregnancy-related LBP.

**Gutke A, Ostgaard HC, Oberg B. Predicting persistent pregnancy-related low back pain. Spine. 2008 May 20;33(12):E386-93.**

Predictors for having persistent PGP or combined pain after delivery were low endurance of back flexors, older age, combined pain in early pregnancy and work dissatisfaction. Identification of women at risk for persistent pain postpartum seems possible in early pregnancy and requires physical examination and self-reports.

**Gutke A, Ostgaard HC, Oberg B. Association between muscle function and low back pain in relation to pregnancy. J Rehabil Med. 2008 Apr;40(4):304-11.**

Women with pelvic girdle pain and/or combined pelvic girdle pain and lumbar pain had lower values for trunk muscle endurance, hip extension and gait speed as compared to women without low back pain in pregnancy and postpartum ( $p < 0.001-0.04$ ). Women with pelvic girdle pain throughout the study had lower values of back flexor endurance compared with women without low back pain. Muscle dysfunction was associated with pelvic girdle pain, which should be taken into consideration when developing treatment strategies and preventive measures.

**Smith MD, Russell A, Hodges PW. Is there a relationship between parity, pregnancy, back pain and incontinence? Int Urogynecol J Pelvic Floor Dysfunct. 2008 Feb;19(2):205-11. Epub 2007 Jul 31.**

This study suggests that pregnancy may lead to earlier development of back pain, without affecting long-term prevalence. Incontinence and back pain may be related because of contribution of the trunk muscles to continence and lumbopelvic control.

**Pennick VE, Young G. Interventions for preventing and treating pelvic and back pain in pregnancy. Cochrane Database Syst Rev. 2007 Apr 18;(2):CD001139**

Adding pregnancy-specific exercises, physiotherapy or acupuncture to usual prenatal care appears to relieve back or pelvic pain more than usual prenatal care alone, although the effects are small. We do not know if they actually prevent pain from starting in the first place. Water gymnastics appear to help women stay at work. Acupuncture shows better results compared to physiotherapy.

