

Restriction in lateral bending range of motion, lumbar lordosis, and hamstring flexibility predicts the development of low back pain: a systematic review of prospective cohort studies

BMC Musculoskeletal Disorders. 2017

With low back pain as the leading cause of disability worldwide, it has become more critical than ever to look at the predictive factors involved in its origin.

This fantastic study from *BMC* examined a multitude of potential factors and found a reduction in lateral bending ROM, lumbar hypolordosis, and a lack of adequate hamstring flexibility all significantly contributed to an increased likelihood of low back pain.

Fortunately, the examination process in our practice looks at all three of these factors, giving us the ability to address any limitations proactively. This study reinforces previously released literature which supported the notion that chiropractic has the potential to evaluate, detect, and provide early treatment of an emerging problem, thus preventing future episodes of back pain.

"Dysfunction of muscles of the lumbopelvic-hip complex (core muscles) has been demonstrated to increase spinal loading and reduce spinal stability with altered core muscle recruitment patterns a hallmark of LBP, particularly in chronic form."

"Lateral flexion, in addition to sagittal plan motion, facilitates the spine to absorb force and it is perhaps due to this restriction in motion and therefore stiffness in the lower back that participants developed LBP."

"...we found that a restriction in lateral flexion and hamstring ROM, as well as, reduced lumbar lordosis were associated with an increased risk of developing LBP over a 12 month period."

Risk of Low Back Pain by Factor

