

# **Proposal of a Home Based Core Strengthening Exercise Program for Patients Suffering from Chronic Non Specific Low Back Pain - Abstract**

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**Purpose:** *Core Strengthening* is a widely referenced paper by sports medicine physicians; however at the time of publication, limited research had been done to evaluate the efficacy of core strengthening on improving lower back pain. This review aims to synthesize current literature on the clinical outcomes of core strengthening programs to develop an evidence-based home exercise program for individuals with chronic low back pain to use as a supplement to physical therapy or as an alternative for those facing barriers such as scheduling constraints, transportation limitations, or lack of insurance coverage.

**Methods:** The randomized controlled trials for this review were identified through a search in PubMed using key terms such as 'core strengthening', 'core stabilization', 'core stability', 'non-specific low back pain', 'chronic low back pain', and 'home based exercise'. Additional papers were used for background information.

**Results:** The best core strength exercise programs achieved improved pain and lumbar stability by first establishing neuromuscular control local stabilizers, then co-contraction of local and global stabilizers and then progressing to dynamic functional activities.

**Conclusions:** Home based exercise programs focused on core strengthening exercises would be a cost effective and convenient way to alleviate the physical, emotional and psychosocial burden on individuals suffering from low back pain.