

# META ANALYSIS THE EFFECTIVENESS OF ACUPUNCTURE VS SHAM ACUPUNCTURE ON LOW BACK PAIN

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## ABSTRACT

**Background:** Low back pain is pain that occur in the lower back area and can be local pain or radicular pain. Acupuncture is a non-pharmacological therapy that can be used as an option to treat low back pain. This study aims to examine the effectiveness of acupuncture and sham acupuncture on reducing pain in cases of low back pain.

**Subjects and Method:** Meta-analysis was carried out with PICO as follows: The population in this study were patients with low back pain with an age range of 20-95 years. Intervention in the form of acupuncture therapy. Comparison in the form of sham acupuncture. Outcome in the form of pain scale. A meta-analysis study was applied to this study with electronic data sources Clinical Key, Google Scholar, MEDLINE/PubMed, Science Direct, Scopus, and Springer. The article used is a full-text article with a Randomized Control Trial (RCT) study design. There are 9 articles used in this study. Articles were analyzed using the Review Manager 5.3 application. The results of this study aim to determine the Standardized Mean difference (SMD) and the heterogeneity of the research sample.

**Results:** Acupuncture was more effective in reducing pain than sham/placebo acupuncture and it was statistically significant (SMD= -0.59; 95% CI = -0.88 to -0.30; p<0.001) with I<sup>2</sup>=79%; p < 0.001.

**Conclusion:** Acupuncture is more effective than sham/placebo acupuncture in reducing pain scale in cases of low back pain.

**Keywords:** accupunture, Sham accupuncture, low back pain.

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