

Summary

Background: Chronic spinal pain is a common and costly condition. There is an increasing demand for effective interventions to reduce the impact of chronic spinal pain on patient's function. Pain Neuroscience Education (PNE) is a promising intervention that attempts to change patient's beliefs about their pain and promote self-management.

Purpose: The purpose of this project is to examine the effectiveness of training physical therapists to use PNE on patient reported outcomes for patients with chronic spinal pain.

Design: Cluster randomized controlled trial

Methods: Regions of clinics will be randomized to receive PNE training or usual care. 254 eligible patients scheduled to receive physical therapy at the participating clinics will be enrolled. Baseline, 2-week and 12-week measures will be taken. The primary outcome will be Patient-Reported Outcomes Measurement System Information System (PROMIS) Physical Function and Pain Interference computer-adaptive tests.

Data Analysis: Each of the primary outcomes (Physical Function and Pain Interference) will be analyzed using the difference in change scores from baseline to 12 weeks within each group using a linear mixed model with random effects for provider and clinic region and adjustment for baseline level of the outcome variable. Statistical significance will be based on $\alpha=0.05$

Significance: It is crucial that healthcare providers gain a better understanding of pain and how to effectively manage it via more conservative means. Preliminary research has shown promise in the use of PNE. It is unknown, however, if training therapists to deliver PNE will result in superior outcomes for those patients with chronic spinal pain.