ORIGINAL RESEARCH

Program of Care Derived from Pain Data Reported in RCTs on Low Back Pain

John K. Maltby, DC¹ Donald D. Harrison, PhD, DC, MSE.² Deed E. Harrison, DC³ Joseph W. Betz, BS, DC⁴ Joseph R. Ferrantelli, BS, DC⁵ Gerard W. Clum, DC⁶

ABSTRACT

Background: Many US insurance companies, managed care organizations, chiropractic researchers, and chiropractic academics claim that, if low back pain resolves with Spinal Manipulative Therapy (SMT), it does so in 6 to 12 visits.

Objective: To determine the validity of claims that low back pain should resolve in 6 to 12 visits with Spinal Manipulative Therapy and to derive a Program of Care based on RCT pain data.

Methods: Searches were performed in PubMed, CINAHL, Mantis, and the Index of Chiropractic Literature (ICL) for Randomized Clinical Trials (RCTs) on low back pain for which the treatment was SMT and/or Mobilization. From these low back pain RCTs, data on the number of subjects, number of visits, and pain outcomes of VAS (visual analogue scale) or NRS (numerical rating scale) were analyzed.

Results: Seventy-four RCTs with SMT as the treatment for low back pain were located. Nine of these were follow-up studies, which resulted in 65 RCTs to be analyzed. Studies with less than

10 subjects were not included. The total NRS data indicated only a 43% (77.51/176.54) improvement in 8.4 average visits. Using a constant linear extrapolation of dose response in studies with chiropractors as the treating doctors, an average of 20.5 visits was needed to resolve low back pain with SMT. Using an initial examination visit, linearly extrapolated visits, once per week stabilization care for 4 weeks, and 2 follow-up examination visits, provides 28 visits needed to document and resolve the average low back pain case.

Conclusion: Data from RCTs did not support claims of restricting Chiropractic care to 6-12 visits for low back pain. In fact, assuming a constant linear dosage response curve, in studies with chiropractors as the treating doctors it was estimated that 28 visits were needed to document, resolve, and stabilize this condition.

Key Words: Low Back Pain, Spinal Manipulation, Spinal Manipulative Therapy, Randomized Clinical Trials, Chiropractic, Frequency and Duration

Introduction

Recently, chiropractic researchers¹⁻³ have suggested that data from randomized clinical trials (RCTs) indicate that low back pain, neck pain, and headaches should be resolved or reach maximum improvement in 6 to 8 visits with spinal manipulative therapy (SMT).

- 1. President, International Chiropractors Association
- 2. President, CBP Nonprofit
- 3. Private Practice Elko, NV
- 4. Private Practice Boise, ID
- 5. Private Practice New Port Richey, FL
- 6. President, Life Chiropractic College West

Additionally, the new Best Practices or Clinical Compass, supported by the Congress of Chiropractic State Associations (COCSA) and termed Council on Chiropractic Guidelines and Practice Parameters (CCGPP),⁴ seems to be using this predetermined number of 6-8 visits.

Although CCGPP⁴ does not have a section on frequency and duration of chiropractic care for low back pain disorders, CCGPP has a 20%-80% financial split contract⁵ with the Work Loss Data Institute (WLDI), which sells guidelines to third party payers and WLDI does have a 6-12 visit frequency