

# **CHIROPRACTIC MEDICINE**

## **Background/Overview/Definition**

Chiropractic medicine is based on locating and adjusting a musculoskeletal area of the body, especially the spine, identified as not having adequately adapted to the body's functional needs. Adjustments treat various conditions primarily by correcting malalignments to bring the body's structure more in line with its function.

## **Short History of Chiropractic Medicine**

Chiropractic Medicine originated in the United States at the end of the 19<sup>th</sup> century by Daniel David Palmer. The term chiropractic is derived from the Greek word "Chiropraktikos," which means "effective treatments by hand."

## **Theoretical/Philosophical Basis of Chiropractic Medicine**

Chiropractic theory is founded on the principle that spinal adjustments influence neurophysiology through mechanical and neurological factors. Many factors, such as accidents, falls, stress and tension can result in displacement or derangements of the spinal column, resulting in irritation of the spinal nerve roots which may influence organ system function and general health.

## **Scope of Practice**

Doctors of chiropractic most commonly treat disorders of the musculoskeletal system. Many chiropractors prescribe nutritional supplements, and some chiropractors provide certain primary care services. Chiropractors do not use drugs or surgery. Chiropractors refer patients for conventional medical care when appropriate, and work collaboratively with medical doctors, physical therapists, and other health care professionals.

## **Diagnostic Methods**

Chiropractors use history, physical examination, laboratory analysis, and diagnostic imaging. In addition, they conduct a chiropractic structural examination, paying particular attention to the spine.

## **Treatment Modalities**

Chiropractic treatments are intended to correct subluxations and reduce or eliminate irritation. The most common form of treatment is a manual adjustment of a vertebral subluxation. Chiropractic medicine also emphasizes nutritional and exercise programs, wellness and lifestyle modifications to promote physical and mental health.

## **Scientific Basis**

There are few basic science, animal, or human studies to substantiate the theoretical basis of chiropractic medicine. One recent meta-analysis (Assendelft 2003) and one very well-done randomized controlled trial (Cherkin DC 2003) found chiropractic to be of little benefit overall for treating low back pain, although some patients clearly did seem to benefit. There is even less data supporting chiropractic for neck pain.

## **Training and Licensure Requirements**

There are currently 16 chiropractic colleges in the United States, with a combined enrollment of over 14,000 students. Admissions requirements include a minimum of two years of undergraduate education, including courses in biology, general chemistry, organic chemistry, physics, psychology, English/communication, and the humanities. Currently, six states require a bachelor's degree in addition to the doctor of chiropractic degree for licensure.

Chiropractic education consists of 4 years of training in physiology, pathology, anatomy, as well as clinical sciences. Adjustive techniques/spinal analysis, principles/practices of chiropractic, physiologic therapeutics, and biomechanics are emphasized.

The practice of chiropractic is licensed and regulated in all 50 states in the United States. State licensing boards regulate the education, experience, and moral character of candidates for licensure, and serve to protect the public health, safety, and welfare. A National Board of Chiropractic Examiners administers the national board examination required for licensure.

## **References**

1. Assendelft WJ et al. Spinal manipulative therapy for low back pain. *Ann Intern Med.* 2003;138(11):871-881.
2. Cherkin DC, et al. A comparison of physical therapy, chiropractic manipulation, and provision of an educational booklet for the treatment of patients with low back pain. *N Engl J Med.* 1998;339(15):1021-1029.
3. Carey TS et al. The outcomes and costs of care for acute low back pain among patients seen by primary care practitioners, chiropractors, and orthopedic surgeons. *N Engl J Med.* 1995;333(14):913-917.
4. Cherkin DC, et al. A review of the evidence for the effectiveness, safety, and cost of acupuncture, massage therapy, and spinal manipulation for back pain. *Ann Intern Med.* 2003 Jun 3;138(11):898-906.