

OVERVIEW OF THE CHIROPRACTIC PROFESSION - David H Peterson DC

HISTORY - Although manipulation and manual therapy have been a part of the healing arts for thousands of years, it was not until the days of Daniel David Palmer and Andrew Taylor Still, the founders of chiropractic and osteopathy, that these methods were codified into a system. Both chiropractic and osteopathy were founded in the late 1800's and both chose to focus on the musculoskeletal system. Andrew Still placed great emphasis on the musculoskeletal component of disease, the importance of sound body mechanics and the important relationship between structure and function. Palmer postulated that subluxation, reduced mobility or improper juxtaposition of a vertebral segment, could interfere with the function of the human nervous system and with the body's innate ability to heal itself.

Chiropractic was founded on a strong philosophical base and vitalistic view of life. All individuals were viewed as being imbued with a life force (innate intelligence) responsible for maintaining bodily function and preventing and fighting disease. Illness was postulated, in large part, to result from interference with the body's ability to fight disease. Early chiropractors theorized that spinal subluxations could be a major contributor to ill health by irritating spinal nerve roots and interfering with the body's ability to self regulate.

Palmer's son Bartlett Joshua (B.J.) gained operational control of the fledging profession in the early 1900's and began promoting an extreme and dogmatic view of chiropractic care. He promoted spinal subluxations as the root cause of all disease and true chiropractic as a profession that only dealt with finding and correcting spinal subluxations with adjustments. At the time, it was not uncommon for chiropractors to be jailed for practicing medicine without a license and some scholars today speculate that much of B.J.'s position resulted from trying to distinguish chiropractic from medicine.

Palmer's autocratic and dogmatic view led to early divisions within the profession, as many were unable to accept his philosophical beliefs. His positions convinced a number of early graduates to form alternative schools and seek different approaches to education and practice. Those advocating for a narrow scope of practice (straights) felt any deviation from strict adherence to core beliefs and practices would jeopardize chiropractic and its unique approach to health care. The other camp (mixers) advocated for a broader education and scope of practice, feeling it was more rational, defensible and effective.

Although the overwhelming majority of chiropractors today do not believe in the subluxation as the root cause of all disease, significant disagreements still persist between those advocating a narrow and broad scope of practice. These differences are reflected in the disparities between chiropractic colleges and variations in state scope of practice laws.

THE PRESENT - Education and Credentialing

Chiropractic colleges are accredited by the Council on Chiropractic Education (CCE). CCE is recognized by the U.S. Department of Education. Most chiropractic colleges also have status with their local regional accrediting boards. All CCE accredited colleges must teach a comprehensive program, incorporating basic science, clinical diagnosis and chiropractic science and a clinical internship.

Admissions prerequisites include a minimum of 90 semester or 135 quarter credits (75% of which must be applicable toward a baccalaureate degree). Prerequisite course work includes 24 semester hours in basic sciences, including biology, chemistry and physics, and 24 semester hours in humanities and social science.

The chiropractic educational program is a minimum of four years, totaling an average of 4800 classroom hours. The first and second years are devoted primarily to basic sciences, chiropractic principles and technique skill development. The third year emphasizes clinical and chiropractic sciences and prepares students for the transition into their fourth year and practical clinical experience treating the public in the college clinics. Government inquires and comparative evaluations have determined that the course work and hours of instruction in the basic sciences are very similar between chiropractic and medical schools. Chiropractic students on average spend more hours in anatomy and physiology and fewer hours in public health. In the clinical arena chiropractic students have very limited training in pharmacology, and critical care but have significantly more training in clinical biomechanics, neuromusculoskeletal diagnosis, manual therapy and exercise rehabilitation.

To become licensed, practitioners must pass four national board exams. Part I tests on basic science knowledge, Part II evaluates clinical science subjects, Part III is a written clinical competency examination and Part IV is a practical OSCE exam which tests candidates on x-ray interpretation & diagnosis, chiropractic technique and case management. In addition to the national boards, most states require candidates to take a jurisprudence exam covering that state's practice act and administrative rules.

The practice of chiropractic is licensed in all 50 states, all provinces of Canada and a growing number of other countries. It is regulated by state statute and by each state's board of chiropractic examiners.

Scope of Practice

Chiropractors are licensed as first contact portal of entry providers in all 50 states. The Council on Chiropractic Education mandates that chiropractic graduates have diagnostic skills necessary to evaluate and determine if patients are suitable for chiropractic care or in need of referral to another health care provider. The range of diagnostic special studies chiropractors can perform or order varies from state to state.

There is wide variation in therapeutic scope of practice from state to state. Nearly all chiropractors use a variety of manual therapies with an emphasis on specific adjustive techniques. Therapeutic alternatives range from manual therapy, physical therapy and spinal adjustments to exercise and nutritional/dietary counseling.

Chiropractors view themselves as specialists in neuromusculoskeletal (NMS) care but also as alternative care givers for a number of other chronic conditions. In these situations chiropractors typically incorporate other therapeutic intervention such as counseling on diet, nutrition and lifestyle modification. Management or co-management of hypertension, diabetes and dyslipidemia are a few examples.

Basic Principles

The following philosophic, educational and practice principles reflect Western States Chiropractic College's (WSCC) position on important characteristics of chiropractic practice. These views may not be reflective of all chiropractic colleges and positions held by the profession. The majority of the following information is quoted from Doctor of Chiropractic: Attributes of the WSCC Graduate White Paper/June 27, 1995)

Philosophic Principles

Emphasis on the neuromusculoskeletal system and its role in health and disease: The contemporary practice of chiropractic maintains its focus on the evaluation and conservative treatment of NMS disorders and the important relationship between the functioning of the NMS system and overall health. Dysfunction and/or disease of the musculoskeletal system is viewed as having the potential to create disorders of the locomotor system that may lead to impaired functioning of the individual. "Thus, disturbances in the integrity of the NMS system are viewed as having the potential to produce not only local disease and symptoms, but also to affect the health of other tissues and organs."

Manual procedures and, specifically, the adjustment are thought to improve the body's ability to self-regulate by affecting the nervous system and thereby allowing the body to seek homeostasis. Reflex mechanisms that support these ideas have indeed been documented, although the effects of manipulation on these reflexes have yet to be adequately assessed. Palmer's original hypothesis stressed the belief that subluxations can affect the functioning and efficiency of the nervous system and the ability of the body to maintain homeostasis and resist disease.

This view was in opposition to the medical thought of the day, which focused on the germ theory and its relationship to disease. Chiropractors today certainly accept the existence and reality of germs, and the role they play in creating disease. A contemporary model postulates that joint dysfunction/subluxation, may be one of many factors serving as a noxious irritant to lower the body's ability to resist disease. Within this paradigm, removal of joint dysfunction/subluxation becomes necessary for optimal health.

Conservative health care approach: "Approach patient care conservatively, use the least invasive and most cost-effective diagnostic and treatment approaches appropriate to the patient's condition."

Emphasis on natural healing processes: "Acknowledge the innate capacity of the human body to heal and maintain itself. Employ management strategies which encourage these inherent recuperative powers by removing the impediments to optimal function and homeostasis. These strategies emphasize restoring proper function to the human body, and incorporate the appropriate modification of diet, lifestyle, and the physical and social environment."

Humanistic approach: "Acknowledge the personal and human aspects of illness, which require compassion and attention to the preservation of patient dignity. Emphasize a patient-centered approach to treatment, recognizing that the patient's needs are the first priority."

Education and Practice Principles

Scientific foundation: "Western States Chiropractic College promotes the scientific method as the foundation of chiropractic practice and discourages reliance upon unscientific assumptions to justify clinical decisions. The curriculum is evidence-based with ongoing development through a consensus process. Graduates are trained to make rational diagnostic and treatment decisions based on the weight of scientific and clinical evidence."

Critical thinking and problem solving: "Use critical thinking and clinical problem-solving skills in the diagnosis and treatment of their patients. Consequently, choose procedures on the basis of diagnostic usefulness and treatment effectiveness, cost-effectiveness, risk-benefit relationships, and patient satisfaction."

Critical appraisal: "Understand research methodology and the rules of scientific evidence. Be prepared to evaluate the strengths, weaknesses, and limitations of the clinical literature as well as emergent health-care concepts and procedures."

Appreciation of scholarship and research: "Understand the value of scholarship and research, and recognize the importance of lending support and participation to the investigation of chiropractic concepts and clinical procedures."

Life-long learning: "Rapid change and development in the health sciences mandate continuous upgrading of diagnostic, treatment, and prevention protocols. The ability to access current information in the chiropractic and general health-care literature is critical to the ongoing refinement of diagnostic and treatment skills."

Research Evidence of Treatment Effectiveness

Most of the clinical trials on chiropractic care have been in the arena of the effectiveness of spinal thrust manipulation in treating musculoskeletal complainants and disorders. The majority has been in spine related complaints, with the majority related to low back pain.

- Acute back pain: strong supporting evidence for short-term effects (supported by RCT, systemic reviews and national guidelines).
- Chronic back pain: some evidence for effectiveness, literature base is expanding (supported by RCT & systemic reviews).
- Disc herniation with radiculopathy: inconclusive evidence manipulation, limited data supporting potential effect.
- Neck pain: evidence to suggest that mobilization and manipulation is superior to medical care and more or as effective as physical therapy and exercise. Evidence is in the emerging stages with more research and updated systemic reviews needed. (supported by RCT & systemic reviews).
- Musculoskeletal conditions other than neck and back pain: promising research but limited randomized trials. Evidence is insufficient to draw firm conclusions.

Commonly used Chiropractic Terms

- 1 Chiropractic Practice: A discipline of the scientific healing arts concerned with the pathogenesis, diagnostics, therapeutics, and prophylaxis of functional disturbances, pathomechanical states, pain syndromes, and neurophysiological effects related to the statics and dynamics of the locomotor system, especially of the spine and pelvis.
- 2 Chiropractic Science: Concerned with the investigation of the relationship between structure (primarily the spine) and function (primarily the nervous system) of the human body that leads to the restoration and preservation of health.
- 3 Subluxation: A motion segment in which alignment, movement integrity, and/or physiologic function are altered although contact between the joint surfaces remains intact.
- 4 Subluxation Complex: A theoretical model of motion segment dysfunction (subluxation) that incorporates the complex interaction of pathologic changes in nerve, muscle, ligamentous, vascular, and connective tissues.
- 5 Subluxation Syndrome: An aggregate of signs and symptoms that relate to pathophysiology or dysfunction of spinal and pelvic motion segments or to peripheral joints.
- 6 Orthopedic Subluxation: A partial or incomplete dislocation
- 7 Innate Intelligence: The intrinsic biologic ability of a healthy organism to react physiologically to the changing conditions of the external and internal environment.
- 8 Vertebral Motion Segment: Two adjacent vertebral bodies and the disc between them, the two posterior joints and the ligamentous structures binding the two vertebrae to one another. Definition includes the consideration of the anatomic and functional relationships of two vertebrae, the mechanical integration of their articular processes and the related musculature, ligaments and synovial membranes
- 9 Joint Dysfunction: Joint mechanics showing area disturbances of function without structural change. Definition embodies disturbances in function that can be represented by decreased motion, increased motion or aberrant motion
- 10 Joint hypomobility: decreased angular and/or linear movement.
- 11 Joint hypermobility: Increased angular and/or linear joint movement
- 12 Joint Fixation: The state whereby an articulation has become temporarily immobilized in a position which it may normally occupy during any phase of physiologic movement. The immobilization of an articulation in a position of movement when the joint is at rest, or in a position of rest when the joint is in movement.
- 13 Adjustment: a specific form of direct articular manipulation utilizing either long or short leverage techniques with specific contacts. It is characterized by a dynamic thrust of controlled velocity, amplitude and direction.
- 14 Manipulation: Therapeutic application of manual force. Spinal manipulative therapy broadly defined includes all procedures where the hands are used to mobilize, adjust, manipulate, apply traction, massage, stimulate, or otherwise influence the spine and paraspinal tissues with the aim of influencing the patient's health.
- 15 Mobilization: The process of making a fixed part movable. A form of manipulation applied within the physiologic passive range of joint motion characterized by non-thrust passive joint manipulation.
- 16 Palpation: The act of feeling with the hands. The application of variable manual pressure through the surface of the body for the purpose of determining the shape, size, consistency, position, inherent motility, and health of the tissues beneath.
- 17 Motion Palpation: Palpatory diagnosis of passive and active segmental joint range of motion.
- 18 Static Palpation: Palpatory diagnosis of somatic structures in a neutral static position.
- 19 Joint play: Discrete, short range movements of a joint independent of the action of voluntary muscles, determined by springing the joint in its neutral position.
- 20 End Play (End Feel): Discrete, short range movements of a joint independent of the action of voluntary muscles, determined by springing the joint at the limit of its passive range of motion.

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