

THESIS



**MANUAL THERAPIES:
OSTEOPATHY AND CHIROPRACTIC**

*Similarities and Differences of:
Osteopathy and Chiropractic*

JAY DAVID
NOVEMBER 2011

Table of Contents

- ***Introduction***
- ***Origin***
- ***Philosophy and Principles***
- ***Treatment Objective***
- ***Diagnosis***
- ***Differential Diagnosis***
- ***Post Diagnosis***
- ***Medical Community Recognition & Public Awareness***
- ***Clinical Treatment Techniques***
- ***Safety of osteopathy and chiropractic***
- ***Research and Study***
- ***Reports and Media***
- ***Future***
- ***Chronology***
- ***References***

Introduction

Maintaining good physical health is one of the most important aspects of our lives because it influences how we think and feel about ourselves as well as others. It can also affect how we deal with everyday life events, such as relationships, employment and coping with change. Looking after our mental wellbeing is just as vital as looking after our physical wellbeing. But like any of God made creatures we humans are no exception to the laws of aging and decay. Over time our bodies will need assistance in recovering from pain which have been afflicted due to many causes. Causes such as trauma, strokes, arthritis, muscle strain and sprains are just some of the pains we will encounter during our lifetime.

People seem to be so anxious about feeling pain to lead us to rely heavily upon oral medication to when sickness strikes. Little do we know that each pill we take does give relief but, with some negative side effects as well, and the feeling of relief is temporary. There are many known alternatives that have been clinically proven to be as effective as medications. Nonetheless, when it comes to treatment of musculoskeletal disorders there are two types of manipulative therapies that are far superior to other alternatives. And offer very minimal if not zero side effects.

Osteopathy and **Chiropractic** are therapies of the musculoskeletal system. Practitioners work with bones, muscles, and connective tissues by using their hands to palpate, diagnose and treat abnormalities of structure and function.

Both Osteopaths and Chiropractors are likely to treat similar conditions with similar techniques, especially in the United Kingdom, where the two evolved along parallel but meet at several common points.

There are a huge number of variations of treatment techniques between individual practitioners of both disciplines and from what they focus on to how they apply treatment. But the absolute primary objective for both Osteopaths and Chiropractors is to identify and relieve the patient of bodily aches and pains. Then ultimately maximize the person's quality of life. More people seem to know about Chiropractors than about Osteopaths. This is because historically, Chiropractors have been more active in promoting and publicizing their work. Osteopaths tend to be more conservative with regards to marketing and promotions.

Origin

The origins of Osteopathy can be traced back to the mid 1800's in Kansas, Missouri when a U.S. Army physician, named Dr. Andrew Taylor Still was confronted and suffered great tragedy with the death of his wife and three children due to spinal meningitis. Dr. Still concluded that the orthodox medical practices of his time were frequently ineffective and sometimes harmful.

He devoted the next thirty years of his life to studying the human body and finding alternative ways to treat physiological disorders. Dr. Still's relentless research and devotion to science formed the basis and discovery of a new medical approach known as Osteopathy. Dr. Still founded the first school of osteopathy – the American School of Osteopathy (now A.T. Still University of the Health Sciences) in Kirksville, Missouri in 1892)

Dr. Andrew Taylor Still once said, *“I do not claim to be the author of this science of Osteopathy. No human hand framed its laws; I ask no greater honor than to have discovered it.”*

The origins of Chiropractic as a science was founded in 1895 by Canadian Daniel David (D.D.) Palmer, was born in Pickering, Ontario who later migrated to the United States. He held various jobs after the Civil war. He worked as beekeeper, school teacher, and even as a grocery store owner. D.D. Palmer always had a keen interest in science and avidly read medical journals throughout the world regarding anatomy and physiology. Having learned techniques of magnetic healing, a common therapy of the time, he moved and set-up an office in Davenport, Iowa.

On September 18, 1895, D.D. Palmer was working late in his office when a janitor, Harvey Lillard, was working nearby. A noisy fire engine passed by outside the window and Palmer was surprised to see that Lillard didn't react at all. He soon realized Harvey Lillard was deaf. D.D. Palmer also later learned that the man had normal hearing for most of his life.

He discovered Lillard had a palpable lump in his back. Lillard's hearing was severely impaired. Palmer theorized that the lump and his deafness were related and started to try to correct it by hand through manipulation. It was then he started to see a closer relationship between the spine and our health after a reported successful restoration of the man's hearing. D.D. Palmer established the Palmer School of Chiropractic in Davenport, Iowa in 1897. (now called Palmer College of Chiropractic with campuses in Davenport-IA, San Jose-Ca, and Port Orange-FL)

D.D. Palmer once quoted, "I am not the first person to replace subluxated vertebrae, but I do claim to be the first person to replace a displaced vertebrae by using the spinous and transverse processes as levers...and to develop the philosophy and science of chiropractic adjustments."

Many accounts of the history of osteopathy mention that one of Dr. Andrew Taylor Still's early students was Daniel David Palmer. Palmer reportedly studied with Dr. Still for only about six weeks. However, the association between Dr. Still and Palmer is usually not mentioned in accounts of the history of chiropractic.

Philosophy and Principles

Both osteopathy and chiropractic share a common history and philosophy which set them apart from the more traditional allopathic medical fields. Rather than focusing on the individual components of the body, Osteopaths and Chiropractors view the body in a more holistic manner, emphasizing the importance of the whole and the interdependence of its parts, as a self-contained, self-healing, fully interconnected and functional unit. Both practices acknowledge the integrity of the spine in ensuring good health. This philosophy is shared by almost all traditional healing arts as well martial arts, including, yoga, tai chi, aikido and many others. It is also found in many treatment modalities in modern complementary and alternative medicine, including Structural Integration or Rolfing®, and Alexander Technique.

Dr. Andrew Taylor Still was one of the first physicians of his day to promote the idea of preventive medicine and philosophy that physicians should focus on treating the disease rather than just the symptoms. When asked, "Why did Osteopathy come before the world as a healing art?" Dr. Still replied: "One says, or has said, that necessity is the mother of invention. It becomes necessary to have some method or system of the healing art based upon a philosophical foundation, because all authors who have written on diseases when their philosophy was carefully read, practiced and weighed, proved itself to be a lamentable failure". The first proponent of this philosophy was Andrew Taylor Still who is credited with founding osteopathy in America in 1874.

Just twenty-one years later, a former student of Dr. Still, Daniel David Palmer, founded the chiropractic discipline. He theorized that misaligned vertebrae interfered with the function of the spinal nerves, thereby blocking the patient's natural healing ability. D.D. Palmer was a man with subjective and personal religious beliefs. He also regarded chiropractic as partly religious in nature.

As an active spiritist, he once said he "received chiropractic from the other world" from a deceased medical physician named Dr. Jim Atkinson. His theories revolved around the concept that altered nerve flow was the cause of all disease, and that misaligned spinal vertebrae had an effect on the nerve flow. He claimed that restoring these vertebrae to their proper alignment would restore health.

D.D. Palmer personally conducted, discovered the basic principle of Chiropractic, developed its philosophy, originated and founded the science and art of correcting abnormal functions by hand-adjusting, using the vertebral processes as levers.

The philosophical and practical differences between Osteopaths and Chiropractors

The differences between osteopathy and chiropractic stem from a subtle variance in philosophy. Barrie Savory, D.O., and author of several Osteopathic books, explains that Osteopaths concur on two principles based on the concept of the body as a unique interdependent system. The first, 'the rule of the artery is supreme,' means that a healthy blood supply is likely to support a healthy bodily environment. Thus, osteopaths take circulation carefully into account when assessing patients. The second, 'structure governs function,' concerns the fact that problems in the structure of the body, for example, too much tension in certain muscles or the misalignment of a bone, can inhibit the natural function of multiple bodily systems. Though the root of the word 'Osteopath' means 'bone,' Osteopaths do not actually treat bones. Rather, they use the bones as levers to improve the condition of other structures in the body like muscles, ligaments, tendons, fascia, and organs. By treating these structures, Osteopaths can aid the body's natural healing ability.

Chiropractors, on the other hand, tend to focus on the spine and the alignment of vertebrae as the primary means of relieving pain and tension throughout the body. The spine consists of the vertebrae, which are bone segments that protect the spinal cord, and the individual nerve branches stemming from it. These nerve branches exit between the bones, conveying important messages between the brain and the rest of the body. Because the vertebrae shift and move with everyday activity, they can misalign and interfere with the nerve messages traveling among them. This interference causes problems, and frequently pain, throughout the body.

Treatment Objective

The primary objective for both osteopaths and chiropractors is, most frequently, to relieve aches and pain. However, Osteopaths also treat a broader range of functional problems, such as disorders of the respiratory or digestive systems. Both Osteopaths and Chiropractors treat more than just bones joints and soft tissues. By working with the nervous system and blood supply they are able to influence all of the bodies systems, making them capable of alleviating the symptoms of a number of diagnosed medical conditions, such as; asthma, stress, digestive disorders, menstrual pain, migraine and many more.

Diagnosis

The word "diagnosis" means to know... through and through, the Greek roots "dia", meaning 'through' (as in diagonal - an angle through) and "gnosis" meaning 'essential knowing.'

The diagnostic process is essential. Before any treatment can begin the attending practitioner must first learn the way in which trauma or injury has come upon the patient.

The nature of an Osteopathic and Chiropractic diagnosis differs from what we usually think of when a physician provides a suggested cause for a sickness or disorder. Both practitioners use hand palpation which is the primary key tool used for seeking for abnormalities in the patients body structure. Using the information received through the hands, the Osteopath or Chiropractor will take into account the integrity of anatomic relationships,

their function, how well the tissues move, the balance of tensions and most importantly the degree of freedom in range of motion.

Osteopaths and chiropractors are both able to perform diagnosis by visual inspection and palpation. However, chiropractors usually also rely on x-rays for diagnosis. Osteopaths do not order to have x-rays unless they are clinically indicated. This minimizes a person's exposure to radiation.

One of the peculiar aspects of Osteopathy is that it is often difficult to separate diagnosis from treatment. Diagnosis and treatment, in a sense, blend together. However, before any treatment begins an extensive patient history must be undertaken to arrive at an etiological factor which then in turn narrow down the location of pain.

Constant feedback from the patient while being treated is essential therefore throughout the treatment process the practitioner is learning about the patient. While formulating their final diagnosis, the Chiropractor or Osteopath may come up with what is known as a 'differential diagnosis'

Differential Diagnosis

A differential diagnosis is formulated of the numerous possible causes behind the symptoms that the patient is displaying. This method is essentially a process of elimination, or at least, narrow this list down to a more specific diagnosis, the practitioner will most probably perform some tests. The results of these can then be added to the background information (lifestyle, medical history, general data like gender) to decide precisely what went wrong.

Although it may seem like a long method of trial and error that may not produce the most accurate results, it has actually been claimed that differential diagnosis is the most effective method of diagnosis in medicine today. This is because it takes in a number of different possibilities and looks in detail at each one to determine the likelihood. This ensures that nothing is dismissed immediately as different individuals often display different symptoms.

It is relatively common for the osteopath or chiropractor to reach the conclusion that the patient is suffering from multiple issues. This is especially frequent when someone has approached the practitioner with complaints of spinal pain as often, numerous issues collaborate to cause the pain.

Post Diagnosis

After examinations and consultations, the Chiropractor or Osteopath should have reached a diagnosis. They will then use this conclusion to determine what kind of treatment would be effective to solve the problem. This will generally be discussed with the patient and will result in a treatment plan. Patient education about how the procedures will be carried out will also be provided at this point. This will allow the patient time to question anything as well as research the techniques to ensure that practitioner is comfortable with them.

The diagnosis may also lead to the formulation a tailored lifestyle plan to be carried out by the patient in between treatments. This may include changing aspects of diet, exercise routine, body posture or reduction in stress levels. This plan is made to benefit the patient and to be sure that the treatment will reap optimal results.

Diagnosis footnote for Manual Osteopaths

*Manual osteopaths practicing countries such as Canada, Brazil, Iran, Barbados, China, India, Jamaica, Egypt, the Bahamas, Argentina, Venezuela and Mexico are **not** allowed to render a diagnosis or perform spinal manipulation. Manual osteopaths must adhere to the laws and regulations governing the jurisdiction they practice in.*

Medical Community Recognition & Public Awareness

Osteopathy and chiropractic are almost exclusively based in the community and in private healthcare sectors. Many practitioners work alone, often from converted rooms in their own homes. Others work in group clinics, in multidisciplinary practices, or in general practices. Some independent manipulative practitioners have established contracts with health authorities,

or primary care groups. Most private health insurance companies offer coverage for manipulative treatment.

In many countries, Osteopaths are trained and recognized as primary care physicians and they see and treat patients just as ordinary doctors do. In the US, osteopaths are also trained in surgery and there are about 20 osteopathy hospitals offering the full range of health care.

More people seem to know about chiropractors than about osteopaths. This is because historically, chiropractors have been more active in promoting and publicizing their work. Osteopaths tend to be more conservative with regards to marketing and promotions. There are approximately 1000 osteopathic manual practitioners in Canada and 67,000 osteopaths in the USA. The majority of them are women.

Clinical Treatment Techniques

Chiropractors employ a wider range of techniques for manipulating the spine, whereas, osteopaths employ a wider range of techniques overall. Apart from manipulation, osteopaths use other techniques such as stretching, trigger point pressure and mobilization. Osteopaths are also trained in cranial osteopathy or cranio sacral therapy, which involve very subtle and gentle adjustments without any "clicking" of the joints. These techniques are seldom used by chiropractors. Another difference is that manual osteopaths do not manipulate "click back" a joint the way chiropractors do.

Osteopaths will apply an array of Osteopathic mobilization techniques from soft tissue therapy at the beginning of treatment and finish off with muscle energy techniques MET or Proprioceptive Neuromuscular Facilitation PNF more commonly performed by Physiotherapists. Chiropractors will typically see the patient for a shorter period of time, perform the necessary manipulation and then apply physiotherapy modality techniques with the use of ultrasound, TENS machine which stands for Transcutaneous Electrical Nerve Stimulation or even acupuncture in some cases.

A typical treatment session lasts 15-30 minutes, although first consultations may take longer. A variety of the techniques described above will be used. Not more than four high velocity thrusts are usually given in a single treatment session. A course of chiropractic treatment for back pain might consist of six

sessions, initially frequent and then at weekly intervals. Osteopaths are more likely than chiropractors to treat on an “as needed” basis.

At Osteopathic schools, there is a joke that the difference between an Osteopath and a Chiropractor is “\$100,000 after five years” because the chiropractor would have seen a lot more patients by then. On a more serious note, some chiropractors are known to require or encourage their patients to sign on for a course of 12 or 24 or more treatments, even for minor complaints like lower back ache. Osteopaths do not impose such requirements. Depending on a person's condition, some complaints may require just one or two treatments. It is only in very serious cases, such as scoliosis or abnormal curvature of the spine, that the patient is advised to undergo regular treatment over a prolonged period. Both professions may offer dietary information, lifestyle advice, postural or ergonomic advice and/or suggest rehabilitative stretches and therapeutic exercises.

"The best osteopath is the best engineer; the best engineer is the best osteopath." - Dr. Andrew Taylor Still

Safety of osteopathy and chiropractic

The most important potential adverse effects of osteopathy and chiropractic are stroke and spinal cord injury after cervical manipulation. Estimates of such severe adverse events vary widely, ranging from 1 in 20,000 patients undergoing cervical manipulation to 1 per million procedures. In recent years the osteopathic and chiropractic professions have shown greater appreciation of the risks of cervical manipulation, and it is possible that improved practice is leading to a reduction in the rate of severe complications. Stroke is the most serious complication resulting from cervical manipulation.

A 1999 article in the *Journal of Neurology* (Hufnagel, *et al.*) described 10 patients who suffered ischemic stroke secondary to vertebral artery dissection or internal carotid artery dissection, all following chiropractic manipulation of the cervical spine. All of the patients had no or mild risk factors and no predisposing factors. Nine cases were documented by magnetic resonance imaging (MRI) or computerized tomography (CT), with an onset of symptoms immediately or within two days of the manipulation. All of these patients had residual effects ranging from mild neurological deficits to a persistent vegetative state, according to the study.

The researchers concluded that patients at risk for stroke after chiropractic manipulation couldn't be identified even before treatment.

More common adverse effects (25-50% of all patients) are mild pain or discomfort at the site of manipulation, slight headache, and fatigue; 75% or more of such complaints resolve within 24 hours. Contraindications to various manipulative techniques have been developed by the appropriate professional bodies, and practitioners are trained to screen patients and assess individual risk factors. Even when some techniques, such as high velocity thrusts, are contraindicated, other manipulative or manual osteopathic mobilizations treatments are highly safe.

Research and Study

In a 1995 study reported in the British Medical Journal (Meade, *et al.*), 741 patients aged 18-64 years with low-back pain received either chiropractic manipulation or outpatient hospital treatment. The objective was to compare the effectiveness over three years of chiropractic and hospital outpatient management for low back pain.

At three years follow-up, according to Oswestry back pain scores, the chiropractic-treated patients' scores were about 29% better than those receiving hospital treatment. The beneficial effect of chiropractic on pain was particularly clear. Those treated by chiropractors had further treatments for back pain after the completion of trial treatment. Among both those initially referred from chiropractors and from hospitals more rated chiropractic helpful at three years than hospital management.

In a 1995 retrospective study (Dabbs and Lauretti), it was concluded that chiropractic cervical manipulation for neck pain is much safer than the use of non-steroidal anti-inflammatory drugs (NSAIDs), by as much as a factor of several hundred times.

In contrast, a 1999 comparative study was conducted by the New England Journal of Medicine. Patients with low back pain who were treated by Osteopathic Spinal Manipulation and with standard hospital care. The study was to reveal whether osteopathic care, including manipulative therapy, would benefit patients with low back pain more than would standard allopathic care. The hypothesis tested was that osteopathic manipulation

would result in more rapid relief of pain and recovery of function than that obtained with standard medical care.

Patients between 20 and 59 years of age with low back pain were identified by triage nurses. A total of 1193 patients were identified by the triage nurses. Of these patients, 981 were ineligible — 39 percent for reasons related to their pain (the distribution of pain or the duration of pain), 26 percent for other reasons (unwillingness to participate, unavailability, or legal reasons), 19 percent because of other medical problems, and 16 percent for reasons pertaining to age. A total of 212 patients attended the base-line visit; 34 of these patients (16 percent) were found to be ineligible on the basis of the exclusion criteria.

In all, 155 patients completed the study; 83 were in the osteopathic-treatment group, and 72 were in the standard-care hospital group.

The standard treatment was provided by physicians. The treatment included analgesics, anti-inflammatory medication, active physical therapy, or therapies such as ultrasonography, diathermy, hot or cold packs (or both), use of a corset, or transcutaneous electrical nerve stimulation. All patients (including those in the osteopathic-treatment group) viewed a 10-minute educational videotape on back pain. The anti-inflammatory agents that could be used were ibuprofen, naproxen, and piroxicam, and the approved analgesics were aspirin, acetaminophen, codeine, and oxycodone. Cyclobenzaprine was used as a muscle relaxant. Manual therapy in any form was not permitted as part of standard hospital care.

The report concluded, osteopathic treatment group received less or no medication and less physical therapy than the standard care hospital group, and the differences in cost were significant. The value of drugs in the treatment of acute pain is supported in controlled trials.

However, as compared with those who wrote more prescriptions, physicians who wrote fewer prescriptions and emphasized education, continued physical activity, and self-care have obtained similar outcomes in terms of pain reduction and increased function. Having known and potentially serious adverse effects and high costs of nonsteroidal anti-inflammatory drug therapy, the achievement of equal outcomes in regard to pain relief, function, and satisfaction, with less use of medication and physical therapy, suggests a higher level of benefit in osteopathic manipulative treatments.

Reports and Media

An extensive evidence based report published in the UK on February 25, 2010 proved the effectiveness of manual therapies in Osteopathic and Chiropractic care over a wide scope of musculoskeletal and non-musculoskeletal conditions. The report was produced in collaboration with Northwestern Health Sciences University in Minnesota, Western States Chiropractic College in Oregon, Canadian Memorial Chiropractic College in Ontario and McMaster University in Ontario.

Figure Legends:

Figure 1. Translating Evidence to Action

Figure 2. Categories of Conditions included in this report

Figure 3. Evidence Summary – Adults – Spinal Conditions

Figure 4. Evidence Summary – Adults – Extremity Conditions

Figure 5. Evidence Summary – Adults – Headache and Other Conditions

Figure 6. Evidence Summary – Adults – Non-Musculoskeletal Conditions

Figure 7. Evidence Summary – Pediatrics – Non-Musculoskeletal Conditions

Figure 1:

Level of Evidence*	Actions Supported
High and Moderate quality POSITIVE evidence	<ul style="list-style-type: none"> • Supports public favorable claims regarding effectiveness • Advise patients that this is an effective treatment choice
INCONCLUSIVE, but favorable evidence	<ul style="list-style-type: none"> • Does not support any public claims regarding effectiveness • Recommend effective alternative if available • Advise patients that this is a treatment option in the absence of an effective alternative
INCONCLUSIVE, and unclear direction of evidence	<ul style="list-style-type: none"> • Recommend effective alternative if available • Advise patients that the effectiveness of this treatment option has not been established
INCONCLUSIVE, but non- favorable evidence	<ul style="list-style-type: none"> • Advise patients that this treatment option is unlikely to be effective • Recommend effective alternative if available
High and Moderate quality NEGATIVE evidence	<ul style="list-style-type: none"> • Advise patients AGAINST this as a treatment option • Recommend effective alternative if available

*See definitions for levels of evidence within the methods section.

Figure 2:

Musculoskeletal	Headache	Non-Musculoskeletal
<ul style="list-style-type: none">• Spinal pain<ul style="list-style-type: none">○ low back○ thoracic○ neck○ coccyx• Extremity pain<ul style="list-style-type: none">○ shoulder○ elbow○ wrist○ hip○ knee○ foot/ankle• Other<ul style="list-style-type: none">○ temporomandibular disorders○ fibromyalgia○ myofascial pain syndrome	<ul style="list-style-type: none">• migraine• tension type• cervicogenic• miscellaneous headache	<ul style="list-style-type: none">• asthma• pneumonia• vertigo• infant colic• hypertension• enuresis• dysmenorrhea• premenstrual syndrome• otitis media

Figure 2

Figure 3:

Spinal Conditions	Intervention	Evidence		
		Inconclusive	Moderate	High
Acute Low Back Pain	Spinal manipulation /mobilization		positive	
Chronic Low Back Pain	Spinal manipulation /mobilization			positive
Chronic Low Back Pain	Massage		positive	
Chronic Low Back Pain	Foot reflexology added to usual medical care	non-favorable		
Sciatica/ Radiating Leg Pain	Spinal manipulation /mobilization	favorable		
Coccydynia	Spinal manipulation	favorable		
Mid Back Pain	Spinal manipulation	favorable		
Acute/subacute Neck Pain	Thoracic spinal manipulation/ mobilization		positive	
Acute Whiplash-Associated Disorders	Mobilization with exercise		positive	
Chronic Neck Pain	Spinal manipulation /mobilization with exercise		positive	
Neck Pain of any duration	Cervical spinal manipulation/ mobilization alone	favorable		
Chronic Neck Pain	Massage		positive	

Figure 3

Figure 4:

Extremity Conditions	Intervention	Evidence		
		Inconclusive	Moderate	High
Shoulder Girdle Pain/ Dysfunction	Manipulation/ mobilization		positive	
Rotator Cuff Pain	Manipulation/ mobilization	favorable		
Shoulder Pain	Massage	favorable		
Adhesive Capsulitis	High-grade mobilization		positive	
Tennis Elbow (Lateral Epicondylitis)	Manipulation	non-favorable		
Tennis Elbow (Lateral Epicondylitis)	Manual tender point therapy	favorable		
Tennis Elbow (Lateral Epicondylitis)	Mobilization with exercise		positive	
Carpal Tunnel Syndrome	Manipulation/ mobilization	favorable		
Hip Osteoarthritis	Manipulation/ mobilization		positive	
Hip Arthroplasty Rehabilitation	Osteopathic manipulative therapy (OMT)	non-favorable		
Knee Osteoarthritis	Manipulation/ mobilization with exercise		positive	
Patellofemoral Pain Syndrome	Manipulation/ mobilization with exercise		positive	
Knee Arthroplasty Rehabilitation	OMT	non-favorable		
Knee Osteoarthritis	Massage	favorable		
Ankle Sprains	Manipulation/ mobilization	favorable		
Ankle Fracture Rehabilitation	Mobilization		negative	
Plantar Fasciitis	Manipulation/ mobilization with exercise		positive	
Morton's Neuroma	Manipulation/ mobilization	favorable		
Hallux Limitus	Manipulation/ mobilization	favorable		
Hallux Abducto Valgus	Manipulation/ mobilization	favorable		

Figure 5:

Headache and other Conditions	Intervention	Evidence		
		Inconclusive	Moderate	High
Migraine Headache	Spinal manipulation		positive	
Migraine Headache	Massage alone	favorable		
Tension type headache	Spinal Manipulation	unclear		
Cervicogenic Headache	Spinal Manipulation		positive	
Cervicogenic Headache	Self-mobilizing Apophyseal Glides		positive	
Cervicogenic Headache	Friction massage and trigger points	non-favorable		
Cervicogenic Headache	Mobilization	unclear		
Miscellaneous Headache	Mobilization	favorable		
Cervicogenic dizziness	Self-mobilizing Apophyseal Glides		positive	
Temporo-mandibular joint dysfunction	Mobilization/ massage	favorable		
Fibromyalgia	Massage	favorable		
Fibromyalgia	Spinal manipulation	unclear		
Fibromyalgia	Manual lymph drainage	favorable		
Myofascial Pain Syndrome	Massage	favorable		

Figure 6:

Non-Musculoskeletal Conditions	Intervention	Evidence		
		Inconclusive	Moderate	High
Asthma	Spinal manipulation		negative	
Asthma	Foot reflexology	non-favorable		
Pneumonia in Older Adults	Osteopathic manipulative therapy	favorable		
Cervicogenic dizziness	Mobilization		positive	
Stage 1 Hypertension	Spinal manipulation added to diet		negative	
Hypertension	Instrument assisted spinal manipulation	unclear		
Stage 1 Hypertension	Upper Cervical (NUCCA) Spinal manipulation	favorable		
Dysmenorrhea	Spinal manipulation		negative	
Premenstrual syndrome	Spinal manipulation	unclear		
Premenstrual syndrome	Massage	favorable		
Premenstrual syndrome	Reflexology	favorable		

Figure 6

Figure 7:

Non-Musculoskeletal Conditions	Intervention	Evidence		
		Inconclusive	Moderate	High
Asthma	Spinal manipulation		negative	
Asthma	Osteopathic manipulative therapy(OMT)	favorable		
Asthma	Massage	unclear		
Colic	Spinal manipulation		negative	
Colic	Cranial OMT	favorable		
Colic	Massage	favorable		
Nocturnal Enuresis	Spinal manipulation	favorable		
Otitis media	OMT	unclear		

- *Interview of Dr. Norman Gevitz, October 10, 2010 on the growth of Osteopathic medicine. (click on icon)*

- *Interview of Dr. Tom Meade, October 1990 on the effectiveness of Chiropractic care. (click on icon)*

Future

Osteopathic medical education has evolved significantly since it was founded more than 100 years ago. In recent years, a number of trends in socio-economics, medical education, the regulatory governing bodies, and privatization of health care have resulted in major changes to the separate system of osteopathic medical education and practice that had arisen by the mid-20th century. The increasing integration of the osteopathic and allopathic medicine's training and practice systems, coupled with the current growth spurt in osteopathic medical colleges, is causing an increased focus on the future of osteopathic medicine in North America and around the world.

Another aspect of concern about the place of Osteopathic Manual Medicine in osteopathic medical schools has been a recognized lack of sufficient research into the biomedical mechanisms of this modality of practice. Over the last decade, research into these questions has become a priority within the profession and has gained momentum at many osteopathic colleges. A particular focus of these efforts was the founding of the Osteopathic Research Center at the University of North Texas Health Science Center College of Osteopathic Medicine in 2002 (with funding from National Institutes of Health and a variety of osteopathic organizations and institutions) to foster nationwide collaborative research. Leaders from osteopathic medical schools, OGME, the American Osteopathic Association (AOA), and others have discussed many of these concerns in summits held in 2006 and 2007. These meetings raised questions and developed a number of recommendations aimed at assessing and considering changes in osteopathic medical education.

The future of osteopathic medical education and, ultimately, the profession itself will be an outcome of a variety of social and the ever changing global economic forces, makes the future greatly depend upon its leadership. Many educational organizations have already taken drastic steps to introduce this manual medicine to the public. Newly founded osteopathic colleges like the National Academy of Osteopathy (NAO) is setting trends and leading the path in educating a new generation of Osteopathic practitioners by making courses conveniently available online in many major cities worldwide. Dr. Andrew Taylor Still would be so proud today knowing that the profession he founded more than a century ago, today holds itself true to its principles and philosophy, to preserve the highest standards of public care.

Chronology

- 1874** Dr. Andrew Taylor Still (1828-1917), a licensed frontier physician, first articulated basic osteopathic principles.
- 1892** First college of osteopathic medicine, the American School of Osteopathy, founded in Kirksville, MO. (See "Osteopathic Colleges heading later in this section for dates of other schools.)
- 1893** First class graduated from ASO, including 17 men and 5 women.
- 1895** D. D. Palmer performed the first chiropractic adjustment.
- 1897** Palmer opened his first chiropractic school which became known as the Palmer School of Chiropractic (PSC).
- 1899** D.D. Palmer and a Davenport, Iowa, allopathic physician feud and the struggle between chiropractic and allopathic medicine begins.
- The first two chiropractic textbooks were published.
D. D. Palmer was jailed for practicing medicine without a license and serves 23 days in Scott County Jail.
The Universal Chiropractors' Association (UCA), the earliest ancestor of today's ACA, is organized in Davenport, Iowa, as a legal protective society for DCs.
- 1906** Vermont became first state to license DOs. Dr. Morikuba, a PSC graduate in Wisconsin, was found innocent of practicing medicine without a license on the grounds that he was practicing a new profession- chiropractic. This set an important precedent for other legal cases around the country.

- 1897** Founding of the American Association for the Advancement of Osteopathy (later known as the American Osteopathic Association) at a meeting held April 19 in Kirksville, MO. Officers established as president, first vice-president, second vice-president, secretary, and treasurer, with a board of trustees of five members. Dues established at \$1. Constitution provided that members were to be graduates of recognized schools of osteopathic medicine.
- 1898** First recorded osteopathic research, at ASO on humans and dogs, to test and record on sphygmograms and cardiograms the effects of stimulation and inhibition and the effects of lesions and their attempted correction. **OSTEOPATHIC PHYSICIAN**, Dec 1908, p. 11). Board of trustees increased to seven members. Adoption of the **POPULAR OSTEOPATH** as the association's official organ (first issue appeared in January 1899, last issue in June 1900). Associated Colleges of Osteopathy organized.
- 1901** Change in name of the American Association for the Advancement of Osteopathy to the American Osteopathic Association. Appearance of the first issue (September) of the *JOURNAL OF THE AMERICAN OSTEOPATHIC ASSOCIATION*. Establishment of first standing committees, as follows: committee on education, committee on publication, and committee on legislation.
- 1903** First inspection of osteopathic colleges.
- 1910** B. J. Palmer introduced x-ray into the curriculum of PSC.
-D. D. Palmer published his major book, *The Chiropractor's Adjuster*.
- 1913** Kansas passed the first state law to license chiropractors.
- 1915** North Dakota and Arkansas are the first states to issue chiropractic licenses.
- 1922** More than 80 chiropractic schools are in operation. Enrollment at Palmer School tops 3,000.

- 1904** Adoption of the code of ethics. Publication of the first directory of osteopathic physicians, as a separate book, under the auspices of the association.
- 1905** Requirement of three-year course for AOA-approved osteopathic colleges (effective in September).
- 1907** A.T. Still Postgraduate College of Osteopathy founded; name changed in 1909 to A.T. Still Research Institute. (See also 1913, 1927.)
- 1913** A.T. Still Research Institute laboratories opened in Chicago. Branch opened in California in 1917; this became the only location after 1918 when the Chicago property was sold. Bulletins and books began to be published by this organization.
- 1914** First issue of the *OSTEOPATHIC MAGAZINE*, published for the laity by the AOA, appeared in January. (The name was changed to *HEALTH* in September 1955.)
- 1915** Requirement for four-year course for AOA-approved osteopathic colleges (effective in September).
- 1917** Dr Andrew Taylor Still passed away on December 12, 1917. More than 5,000 DOs in practice.
- 1930** A merger of the Universal Chiropractic Association and an older ACA forms the National Chiropractic Association, today's ACA.
- 1941** The first standards for accrediting chiropractic schools and colleges were set up by John Nugent, D.C., director of education for the National Chiropractic Association
- 1944** Congress passed the G.I. Bill, which made benefits available to WWII veterans who planned to study chiropractic. The Canadian Memorial Chiropractic College (CMCC) was founded in Toronto, Ontario
- 1945** The Canadian Memorial Chiropractic College in Toronto, Ontario was founded.
- 1958** Chiropractic Economics debuts as a magazine published six times per year.
- 1961** B.J. Palmer, son of the founder of chiropractic and founder of the ICA, passes away.
- 1963** The National Board of Chiropractic Examiners was incorporated. The board helped set nationalized standards for licensing chiropractors by developing examinations that all chiropractors had to pass to become licensed.

- 1918** DOs play key role in treating various illnesses as noted by the profession's involvement in the influenza pandemic of 1918-1919.
- 1918** First issue of the *FORUM OF OSTEOPATHY*, the association's news magazine, appeared in April. (Name changed to *THE DO* in September 1960.) American Osteopathic Foundation (for support of research, publications, and educational facilities, as well as a variety of other philanthropic activities) founded. In 1935 merged with A.T. Still Research Institute to become A.T. Still Osteopathic Foundation and Research Institute.
- 1927** American Osteopathic Foundation (for support of research, publications, and educational facilities, as well as a variety of other philanthropic activities) founded. In 1935 merged with A.T. Still Research Institute to become A.T. Still Osteopathic Foundation and Research Institute.
- 1938** Adoption of a plan for the standardization of osteopathic specialties.
- 1967** DOs drafted as medical officers in the armed forces. AOA recognized by the National Commission on Accrediting as accrediting agency for all facets of osteopathic education. Osteopathic hospitals approved by National League for Nursing as clinical training facilities for the associate degree in nursing.
- 1972** Congress voted to include chiropractic care under Medicare.
- 1974** Louisiana passed a licensure law for chiropractic, the last state to do so. -The U.S. Office of Education recognized the Council on Chiropractic Education (CCE) as the official accrediting body for chiropractic colleges. The first international interdisciplinary conference on spinal therapy, including chiropractic, was held. This was the first time chiropractors, medical doctors, osteopaths and scientists met on an equal level to discuss the subject of spinal manipulation. This provided scientific respectability for the chiropractic profession. Chester Wilk, D.C. and four other chiropractors filed a federal antitrust lawsuit against the AMA and other groups and individuals.
- 1978** In March 1978 the first issue of the Journal of Manipulative & Physiological Therapeutics (JMPT) is published David D. Palmer, the grandson of the founder of chiropractic, dies at age 71
- 1981** The *Journal of Manipulative and Physiological Therapeutics* (JMPT) becomes the first (and still only) chiropractic periodical to be indexed by the National Library of Medicine in *Index Medicus*.

- 1969** Almost 200 DOs serve in the military as medical officers only three years after the Secretary of Defense accepts qualified DOs who volunteer as officers.
- 1982** More than 20,000 DOs were in practice.
- 2001** Enrollment in osteopathic medical schools continues to expand, recording 3,043 first-year students in 2001--an increase of 881 from 1993.
- 2002** Osteopathic medical profession continues to grow, recording 42,210 DOs and 19 osteopathic medical schools.
- 1989** A study published in the Western Journal of Medicine found chiropractic patients to be three times as satisfied with their care as compared to family practice physicians for low back pain. - The Wilk decision favoring the chiropractors was upheld by the U.S. Supreme Court by refusal to hear the AMA appeal
-The Meade study in Britain found chiropractic care superior to medical care for lower back pain.
- 1992** Congress authorized commissioning of chiropractors in the armed services.
- 1993** Manga Report of Canada finds chiropractic care most efficient and cost- effective form of care for lower back pain.
- 1994** AHCPR published guidelines for low back pain care favoring spinal manipulation

2003

The Healer Within®, a 2,000 square-foot traveling science center exhibit created by the Kirksville College of Osteopathic Medicine (KCOM) in Kirksville, Mo., arrives at the Smithsonian Arts and Industries building in Washington, DC, May 28 -- September 5, 2003. The Healer Within®, exhibit explains the preventative concepts of health and wellness and is based on the principals of osteopathic medicine and self-directed wellness. The central theme throughout the exhibit is that each of us have the power within us to obtain optimal health. Representatives from around the world gather in Chicago to explore the possibility of creating a worldwide osteopathic medical organization.

2010

NAO National Academy of Osteopathy was founded in Toronto, Ontario by Dr. Shahin Pourgol. Now becoming a major catalyst in developing Osteopathic training throughtout the world.

1995

Chiropractic celebrates its 100th birthday in celebrations around the world

2004

A major U.S. government study shows that 40 million have used chiropractic and consumer demand for alternative healthcare is increasing.

References

1. Osteopath Network – U.K.
2. Article Rich by Arthur Reagan
3. American College of Physicians
4. Wikipedia
5. The Chiropractic Resource Organization
6. World Chiropractic Alliance
7. The Daily Mail - U.K.
8. Osteopathy – Art of Practice by Mark Rosen
9. AAMC – Article by Shannon Stephen
10. International Osteopathic Association
11. Physiotherapy Modalities – Article by Liz Van Zutphen
12. British Medical Journal – Article by Andrew Vickers & Catherine Zollman
13. The New England Journal of Medicine – Article by Gunnar B.J. Andersson, Tracy Lucente, Andrew M. Davis, M.P.H., Robert E. Kappler, James A. Lipton, and Sue Leurgans.
14. The Journal of the Canadian Chiropractic Association – Article by Dr. Stan Gorchynski

**In Dedication to my Grandmother Natividad Dy Nepomuceno
Special Thank You to my Parents Everita & Bienvenido David Jr.**