

**Review Article***Copyright © All rights are reserved by David Burke*

# Native American Influences on Osteopathic Medicine and Holistic Health

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Osteopathic medicine, founded by Andrew Taylor Still in the late 19<sup>th</sup> century, represents a holistic approach to healthcare that emphasizes the interconnectedness of body, mind, and spirit. Its origins are deeply intertwined with Native American healing traditions, particularly those of the Shawnee, which shaped Still's philosophy and practices. This manuscript explores the Shawnee's influence on the emergence of osteopathic medicine, its current strength in the United States, and the broader impact of Native American tribes, including the Cherokee and others, on the growing adoption of healthy diets, natural foods, and holistic philosophies. It situates osteopathy within the historical context of 19<sup>th</sup>-century medicine, examines its evolution amidst medical reforms, and highlights the resurgence of indigenous knowledge in contemporary wellness culture.

**Definition and Comparison to Allopathic Medicine**

Osteopathic medicine is a distinct branch of medical practice that focuses on holistic health, preventive care, and the body's self-healing mechanisms. Osteopathic Physicians (DOs) utilize Osteopathic Manipulative Treatment (OMT), a hands-on technique to diagnose and treat musculoskeletal issues, alongside conventional medical interventions. While DOs and allopathic physicians (MDs) complete similar curricula, pass comparable licensing exams, and practice in all medical specialties, DOs emphasize patient-centered care and manual therapies. The World Directory of Medical Schools lists both DO and MD programs as U.S. medical schools, and both

require Graduate Medical Education (GME) via residency for licensure.

**Current Strength and Growth**

Of the approximately 1,032,365 active physicians in the United States (AAMC data), 11% are DOs. However, DO enrollment and graduates have expanded significantly faster than MD programs. As of 2024–2025, DO programs account for nearly 25–30% of all U.S. medical students (with first-year DO matriculants representing about 30% of total new enrollees across MD and DO schools in recent cycles). Since 2014–2015, a single accreditation system under the Accreditation Council for Graduate Medical Education (ACGME) has unified residency training for both MD and DO graduates. The American Osteopathic Association (AOA) [1], established in 1897, continues to advocate for DOs, who are licensed to practice medicine and surgery in all states.

**Historical Context: Medicine In The 1800s**

In the 19<sup>th</sup> century, medical practice lacked standardization, with proprietary schools offering minimal training and ineffective treatments. The Civil War exposed medicine's limitations, with high mortality from infections and crude surgical techniques. The 1910 Flexner Report [2], commissioned by the Carnegie Foundation, criticized this disorganized system, advocating for science-based education modeled after Johns Hopkins University. It led to the closure of nearly two-thirds of medical schools by 1935, including

many osteopathic institutions, though survivors modernized curricula while retaining OMT.

### Shawnee Influence on Osteopathy's Emergence

Andrew Taylor Still, born in 1828, developed osteopathy after personal tragedies, including the 1864 deaths of three children from meningitis and another child shortly after birth, which fueled his distrust of conventional medicine. Living among the Shawnee and Potawatomi in Kansas and Missouri, Still learned their holistic healing practices. His autobiography details observing Shawnee bone-setting, such as resetting a dislocated hip using a pony and sapling, which inspired OMT. Still's principles—the body as a unit, its self-regulatory mechanisms, and the interrelation of structure and function—echo Shawnee beliefs in holistic health and physical balance. He rejected drug-heavy treatments, aligning with Native American reliance on herbs, rituals, and manual therapies. Still's dissections of Native American bodies further informed his anatomical knowledge, shaping osteopathy's focus on structure.

### Founding of Osteopathy

In his autobiography, Andrew Taylor Still vividly recounts his transformative experiences among the Shawnee, which catalyzed the development of osteopathy. In 1853, Still and his wife Mary Elvira, a pharmacist, moved to the Wakarusa Mission in Kansas, a Shawnee territory, where he immersed himself in their culture. He wrote, "In May, 1853, my wife and I moved to the Wakarusa Mission, Kans., occupied by the Shawnee tribe. It was all Indian there" (Still, *Autobiography*, p. 60–61). Assisting his father, a physician and preacher trained at Cincinnati Medical School, Still treated Native Americans, noting, "Then with my father I doctored the Indians all fall" (p. 61). He learned the Shawnee language, stating, "I soon learned to speak their tongue, and gave them such drugs as white men used, cured most of the cases I met, and was well received by the Shawnees" (p. 61–62). His daughter Blanche's ability to write Shawnee, reverting to it after a stroke, underscores the family's deep connection to the tribe.

Still's observations of Shawnee healing practices profoundly shaped his philosophy. He witnessed a dramatic bone-setting technique: "I saw an Indian dislocate his hip. The Indians tied his limb to a pony, placed astride a long sapling tree, and the pony driven away with whips. The hip was reset" (*Autobiography*). This incident, which he later emulated by setting hips on sidewalks or doorsteps, inspired his focus on manual manipulation. As Dr. Tucker, a colleague, noted, Still described the process simply: "All you have to do is picture the Y ligament and the knots of the socket." Still's autopsies on Shawnee victims of cholera deepened his anatomical knowledge, while resetting a dislocated cervical spine, relieving paralysis, reinforced his belief in manipulation's healing potential. He wrote, "This led to belief that manipulations could provide profound healings."

Still's rejection of conventional medicine intensified after his children's deaths, which he attributed to ineffective drug-based treatments. In his *Philosophy and Mechanical Principles of*

*Osteopathy* (1899), he articulated his disillusionment, recounting a conversation with Dr. J.M. Neal of Edinburgh, who dismissed drugs as "bait for fools" and medicine as a "trade followed by the doctor for money" (Still, *Philosophy*, 1899) [3]. Neal's view that "nature was a law capable of vindicating the power to cure" resonated with Still, who began experimenting with manual techniques. He stated, "I began to realize the power of nature to cure after a skillful correction of conditions causing abnormalities had been accomplished so as to bring forth pure and healthy blood, the greatest known germicide" (*Philosophy*, 1899). Still hesitated to proclaim his discovery, noting, "I began to treat diseases by osteopathy as an experiment and notwithstanding I obtained good results in all diseases, I hesitated for years to proclaim my discovery."

Still's philosophy emphasized harmony with nature, rejecting "injurious schools" that promoted "morphine, whiskey, and other drug-taking habits" (*Philosophy*, 1899). He viewed the body as a triune entity: "First there is the material body, second the spiritual being, third a being of mind which is far superior to all vital motions and material forces whose duty is to wisely manage this great engine of life" (*Philosophy*, 1899). He believed osteopathy was not a single discovery but "a long series of discoveries and ideas spanning decades... seen for the first time in a single perspective" (*Philosophy*, 1899). His approach prioritized structural alignment, stating, "The living body is a collective unit and the body's structure of bones, muscles, nerves, and circulation require correct positioning to have good health" (*Autobiography*). He advocated for the body's self-healing power: "Every living organism has within it the power to manufacture and prepare all chemicals and forces needed to build and rebuild itself" (*Autobiography*, p. 447).

Still's Shawnee-inspired insights culminated in 1874 [4], when he intensified his study of the body's mechanics: "I began a more extended study of the drive-wheels, pinions, cups, arms, and shafts of life, with their forces and supplies, framework, attachments by ligaments, muscles, origin, and insertion" (*Autobiography*, p. 447). He adopted a Shawnee practice of observing without preconception, which he called "taking an Indian look at something," described poetically: "With the iron hand of will I barred the gates of memory, set out the past with all its old ideas. My soul took on a receptive attitude, my ear was turned to nature's rhythmic harmony" (*Autobiography*, p. 378). This mindset led to his realization that "the osteopath seeks the cause, removes the obstruction and lets Nature's remedy, arterial blood, be the doctor" (*Philosophy*, 1899). The observations about mechanics resonated with the use of alignment of the musculoskeletal system as a means to allow the body to heal. Energy did not only flow along the meridians but also along the properly aligned musculoskeletal system. The inclusion of these realignment techniques has given rise to a discussion of the growth of chiropractic out of the alignment techniques taught by still. While there are intriguing parallels between Cherokee bodywork techniques and the principles of chiropractic care, the evidence suggests that chiropractic, as formalized by Daniel David (D.D.) Palmer in 1895, was influenced by a variety of sources, including European medical traditions, osteopathy, and possibly

Native American practices, but not primarily or exclusively Cherokee bodywork.

Cherokee bone-setters and bodywork practitioners were among those tribal members surround the Still home. These used precise manipulations to realign joints and relieve pain, similar to chiropractic's high-velocity adjustments. Historical accounts from the 19th century indicate that Cherokee and Dene (Navajo) bone-setters were preferred over conventional physicians for their efficacy, suggesting a widespread reputation for manual therapy. Key elements of Cherokee bodywork include:

- **Osteopathic-like Massage and Manipulation:** Cherokee healers used hands-on techniques involving deep pressure alternated with gentle rocking release to address musculoskeletal issues. These manipulations aimed to restore balance and alignment, promoting the body's natural healing processes. Breath was used to "reanimate the body" and "draw spirit" into affected tissues, emphasizing a holistic approach.
- **Energy Work and Spiritual Healing:** Cherokee bodywork often involved non-contact healing, where healers used their hands to "sweep away spiritual intrusions" or "brush in healing powers." As described by Ken Cohen [5], a scholar of Native American medicine who worked with a Cherokee mentor, healers would warm their hands over coals and circle them on or above affected areas, imagining "electrodes within the body" to channel healing energy (Cohen, Native American Medicine).
- **Acupuncture-like Practices:** The Cherokee were familiar with acupuncture meridians, using thorns or porcupine quills as needles. The 19th-century Swimmer manuscript, housed at the Smithsonian Institute, documents this practice, noting its use by Cherokee healers despite dismissal by European observers as "primitive" compared to leeching.
- **Bone-Setting:** Cherokee bone-setters were skilled in realigning dislocated joints and fractures, a practice considered safer and more effective than many 19th-century Western medical interventions. These techniques involved precise manipulations to restore structural integrity, similar to modern chiropractic adjustments.

These practices were rooted in a holistic worldview, where health was seen as a balance among body, mind, spirit, and environment. Illness was often attributed to imbalances, which healers addressed through physical manipulation, herbal remedies, rituals, and community involvement. However, the man who laid claim Chiropractic care was founded by D.D. Palmer in Davenport, Iowa, in 1895, when he reportedly restored a patient's hearing through a spinal adjustment. Palmer's philosophy centered on the idea that misalignments of the spine, which he termed "subluxations," disrupted the nervous system and caused disease. By correcting these subluxations through manual adjustments, health could be restored. The key principles of early chiropractic include:

- **Spinal Manipulation:** High-velocity, low-amplitude thrusts

to adjust spinal vertebrae, aimed at relieving nerve interference.

- **Innate Intelligence:** Palmer's belief that the body possessed an inherent healing capacity, regulated by the nervous system, which could be optimized through spinal adjustments.
- **Drugless Healing:** A rejection of pharmaceuticals in favor of manual therapy, aligning with broader 19th-century alternative health movements. Palmer was influenced familiar with osteopathy, founded by Andrew Taylor Still in 1892. Palmer also drew from European medical traditions, including the works of Hippocrates and Galen, who discussed spinal manipulation, and 19th-century bone-setting practices common in Europe and North America. While Palmer's writings do not explicitly mention Cherokee or Native American influences, the proximity of Native American communities in the Midwest and the cultural exchange of healing practices during the 19th century make it plausible that he was exposed to indigenous techniques, either directly or indirectly. Given that Palmer was aware of osteopathy and even briefly collaborated with Still's students, it's possible that Native American techniques indirectly reached chiropractic through osteopathy. The Shawnee and Cherokee, as neighboring tribes, shared similarities in bodywork, and Still's work may have served as a conduit for these practices. This theory suggests that Palmer may have been influenced by Native American practices, including Cherokee bodywork, through intermediaries like Still or local healers, though he did not acknowledge these sources. Without primary sources linking Palmer to Cherokee healers, the connection remains speculative. Osteopathy's use of manual manipulation, developed by Still with Shawnee influences, likely provided a closer model for Palmer's adjustments. Some historians argue that chiropractic evolved as a derivative of osteopathy, with Palmer refining Still's techniques into a spine-centric system
- The Swimmer manuscript and other Cherokee records document bodywork and acupuncture-like practices but do not describe spinal-specific adjustments akin to chiropractic. The Cherokee's broader musculoskeletal focus differs from Palmer's narrow emphasis on spinal subluxations. The Cherokee's bodywork was embedded in a cultural and spiritual context that Palmer's mechanistic chiropractic largely omitted. This divergence suggests that any influence was filtered through Western lenses, diluting its indigenous origin

In 1892, Still founded the American School of Osteopathy in Kirksville, Missouri, formalizing his principles. Early osteopaths faced resistance from the American Medical Association (AMA), which labeled osteopathy a "cult" until the 1960s. Legal battles, beginning with Vermont's 1896 licensure law, secured practice rights in all states by the mid-20th century. The AOA set standards, and osteopathic schools adapted to Flexner's scientific requirements, ensuring survival and growth.

These landscape of manual therapies that may have indirectly influenced chiropractic and osteopathy:

- **Zuni:** Practiced high-velocity adjustments of the neck and

spine, resembling chiropractic techniques.

- Dene (Navajo): Known for bone-setting, considered safer than 19th-century physicians.
- Hopi: Inspired Hakomi massage, emphasizing emotional and physical integration.
- Native American Stone Massage: Used hot and cold stones for pain relief, a precursor to modern stone massage.

## Current Strength of Osteopathic Medicine

Osteopathic medicine has achieved parity with allopathic medicine, with DOs practicing in all specialties and gaining staff privileges in Veterans Affairs hospitals in 1993. Despite historical bias, the AMA now defines a physician as holding either an MD or DO degree. Public awareness remains limited, and terms like “doctor” are used by other professions, causing confusion. However, DOs’ rigorous training, including 200–300 hours of OMT, ensures their competence. The OSU College of Osteopathic Medicine at the Cherokee Nation exemplifies ongoing ties to Native communities, training physicians for underserved areas.

## Medicine as Business: Practice and Pharmaceuticals

The Flexner Report professionalized medicine but prioritized scientific rigor over patient-centered care, fostering a pharmaceutical-driven model. This shift, coupled with high healthcare costs and side effects, has fueled dissatisfaction. Issues like the opioid crisis, inadequate mental health treatment (30–45% remission rates for depression), and chronic pain persistence (65% of sufferers remain affected after a year) highlight conventional medicine’s limitations. These failures drive interest in natural and holistic alternatives, many rooted in Native American traditions.

## Native American Contributions to Healthy Diets and Holistic Philosophies

### Transition to Broader Native American Influence

The holistic ethos of osteopathy, inspired by the Shawnee, aligns with a broader Native American influence on U.S. health trends. Tribes across the Americas have shaped modern diets, herbal medicine, and wellness philosophies, addressing public demand for natural, preventive care amidst conventional medicine’s shortcomings.

### Dietary Contributions

Native American tribes introduced staple foods integral to U.S. cuisine, reflecting nutritional wisdom:

- Beans: Domesticated in Mesoamerica and the Andes, beans (e.g., pinto, black) provide protein and fiber, comprising 70–80% of U.S. legume consumption (USDA, 2017). They reduce heart disease and diabetes risks, aligning with the Mediterranean diet.
- Corn: A Mesoamerican staple, corn offers fiber and antioxidants, consumed at 7.5 pounds per capita annually (USDA, 2019) [7].

- Tomatoes: Central and South American tomatoes provide lycopene, supporting heart health.
- Squash: Varieties like pumpkin, rich in vitamins A and C, support eye health.
- Peanuts: South American peanuts offer monounsaturated fats, consumed at 7.5 pounds per capita annually.
- Chili Peppers: Containing capsaicin, they have anti-inflammatory benefits.
- Potatoes and Cacao: South American contributions, potatoes are a dietary staple, while cacao supports cardiovascular health.

These foods, integrated into American diets, reflect osteopathy’s preventive ethos and indigenous knowledge, though commercialization often obscures their origins. Still emphasized moderation in diet, viewing food as “fuel” and overconsumption as detrimental to health: “Let me eat quick and trot and I will have health and strength” (Autobiography, p. 447).

## Herbal Medicine

Native American pharmacology includes herbs validated by modern science:

- Sage: Used by Shawnee and Navajo for respiratory and digestive issues, now a popular tea.
- Echinacea: Cherokee and Plains tribes used it for immunity, now a leading supplement.
- White Willow Bark: A Cherokee pain reliever, its salicin inspired aspirin.
- Goldenseal: Cherokee antiseptic, paired with echinacea in immune formulas.
- Yarrow: Shawnee hemostatic herb, used for wounds and colds.

These herbs, part of a holistic approach, are widely adopted in U.S. natural medicine, though sustainability concerns arise from overharvesting.

## Healing Rituals

Native American rituals have influenced modern wellness:

- Smudging: Shawnee and Cherokee practice of burning sage or sweetgrass for purification, adopted for stress relief.
- Sweat Lodge: Plains tribes’ purification ritual, adapted as “sweat therapy” for detoxification.
- Vision Quest: Lakota practice of solitude for spiritual guidance, mirrored in retreat programs.
- Healing Ceremonies: Navajo ceremonies combining herbs and manipulation, resonating with OMT.

These rituals emphasize mind-body-spirit balance, paralleling osteopathic principles.

## Holistic Philosophies

The Native American Medicine Wheel symbolizes interconnectedness, inspiring holistic health models. Native storytelling, emphasizing presence, parallels mindfulness practices like mindfulness-based stress reduction (MBSR) and cognitive therapy (MBCT), used for pain, depression, and stress. Functional medicine, addressing root causes, reflects indigenous principles of balance. The National Center for Complementary and Alternative Medicine (NCCAM), established in 1991, supports research into these therapies, while the [8] 2007 UN Declaration on the Rights of Indigenous Peoples affirms tribes' rights to traditional medicines.

## Other Tribal Influences

Beyond the Shawnee, numerous Native American tribes contributed to bodywork and healing practices that resonate with osteopathic principles. The Cherokee, neighbors to the Shawnee in regions like northern Kentucky and southern Ohio, developed a sophisticated bodywork system encompassing osteopathic-like massage, manipulation, breath, and energy work. Central to Cherokee techniques were the alternation of deep pressure and gentle rocking release, with breath used to "reanimate the body and draw spirit into affected tissues." They also employed crystal scanning, channeling spirits, and energy medicine. The Cherokee were familiar with acupuncture meridians, using thorns or porcupine quills as needles, as documented in the 19th-century Swimmer manuscript at the Smithsonian Institute, which noted their use despite contemporary dismissal as "primitive" compared to leeching.

Ken Cohen, in his book on Native American medicine, described Cherokee practices: "Massage, healing touch, and noncontact healing are practiced by Native healers throughout North and South America. Often the hands are used to sweep away or remove spiritual intrusions or to brush in healing powers. Cherokees warm their hands over coals and circle their palms either on or above an affected area... creating what they now call 'electrodes within the body'" (Cohen, Native American Medicine). This approach, blending physical and spiritual healing, parallels OMT's focus on structural alignment and holistic balance.

Other tribes contributed distinct bodywork traditions. The Zuni of New Mexico practiced high-velocity neck and spine adjustments akin to chiropractic. Dene (often misnamed Navajo) and Cherokee bone-setters were preferred over 19th-century physicians for their safety and efficacy. Hopi practices inspired Hakomi massage, while Native American use of hot and cold stones for pain relief became modern stone massage. These practices integrate physical, emotional, psychological, and spiritual dimensions, reinforcing osteopathy's holistic roots.

Scholars debate whether Still, who served as a physician for the Shawnee Nation for over 20 years, adapted Shawnee and Cherokee bodywork into osteopathy. Critics argue he reframed their energetic and spiritual techniques into a mechanical framework to suit European paradigms, a view supported by the similarities between Shawnee manipulation and OMT. Regardless, Still's exposure to

these practices undeniably shaped his rejection of drug-based medicine and his emphasis on manual therapy.

## Drivers of Adoption

Public interest in natural and holistic health stems from:

- **Dissatisfaction with Conventional Medicine:** Pharmaceutical side effects, limited chronic disease outcomes, and the opioid crisis drive alternatives.
- **Cultural Shifts:** Diversity and environmental concerns fuel a "back-to-nature" movement.
- **Access and Cost:** High healthcare costs and partial insurance coverage for therapies like acupuncture increase accessibility.
- **Media Influence:** Celebrity endorsements and media amplify alternative medicine.
- **Personal Autonomy:** Emphasis on individual responsibility resonates with Native philosophies.
- **Scientific Evidence:** Studies support acupuncture, herbal remedies, and mindfulness, though some therapies lack rigorous validation.

## Challenges and Legacy

Challenges include limited scientific validation, insurance coverage gaps, and resistance from conventional medicine. Native knowledge risks appropriation without acknowledgment. However, tribal sovereignty, affirmed by laws like the Indian Self-Determination Act (1975) and Supreme Court rulings (e.g., *Becerra v. San Carlos Apache Tribe*, 2024), supports tribes' healthcare autonomy, including potential use of natural substances like psilocybin. The OSU College of Osteopathic Medicine at the Cherokee Nation and international declarations like UNDRIP (2007) honor indigenous contributions while addressing health disparities.

## Conclusion

Osteopathic medicine, born from Shawnee and enriched by Cherokee and other Native American influences, bridges indigenous healing traditions and modern healthcare. Its growth reflects a cultural shift toward natural foods, herbal remedies, and holistic philosophies rooted in indigenous wisdom. As tribes reclaim their healing practices, supported by legal and scientific frameworks, their contributions reshape American health, emphasizing balance, prevention, and respect for nature. Osteopathy's journey underscores the power of integrating diverse knowledge systems to enhance human well-being.

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