



Commentary on the globalization of osteopathic medicine

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KEYWORDS:

Globalization; Osteopathic medicine Osteopathic medicine has taken a different direction internationally than it has in just the United States. A. T. Still's initial practice of osteopathy was predominantly manually based, because he believed the use of medications by the orthodox medical profession at that time was often more detrimental than helpful to patients. He did not quite envision the challenges that osteopathic medicine would face and how it would thereafter evolve in the United States.

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"... Osteopathy, as little as is known of it now, bids fair in a very few years to penetrate the minds of the philosophers of the whole earth ..."

—Still, Autobiography, revised edition, 1908

History of the American model

Andrew Taylor Still founded the American School of Osteopathy (ASO) in Kirksville, Missouri in 1892. After Still graduated several classes, multiple schools were formed. At the beginning of the 20th century, the teaching of medicine within the United States was largely unregulated and the curriculum varied widely between both MD and DO schools. In 1910, the Flexner Report evaluated the quality of medical education and the number of schools in the United States and, as a result, numerous allopathic and osteopathic schools were closed and/or merged pending restructuring of their curricula. Pharmacology was not added to osteopathic medical curricula until the 1929.

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History of the British model

An Englishman named John Martin Littlejohn studied at the Kirksville school under A. T. Still and became a DO in 1900. He went on to establish the American College of Osteopathic Medicine and Surgery, which later became Midwestern University/Chicago College of Osteopathic Medicine of (MWU/CCOM). Littlejohn eventually returned to England and formed the first osteopathic school outside of the United States, the British School of Osteopathy (BSO) in 1915. Because the British medical fraternity was already well established in the United Kingdom, they did not want competition from another medical model and therefore the practice of osteopathy in England was purely based on a model of manipulative medicine. ¹

All countries that have established osteopathic schools outside of the United States encountered similar blockades from their countries' existing medical models. Because of these blockades, the practice of osteopathy outside the United States is based on manipulative practice, with limited practicing rights. International practice rights vary from country to country. In some countries where the practice of osteopathy is regulated, there are extended rights to prescribe diagnostic imaging and some laboratory tests, perform dry needling (acupuncture), and recommend over-the-counter medications (Tables 1-4).

The Oxford English Dictionary defines physician as "a person qualified to practice medicine." The World Health

Countries where unlimited practice rights for US-trained osteopathic physicians were denied*

 1 3
Ireland
Uganda
Malaysia
Aruba
Spain
Switzerland
Singapore
Mexico [†]
 Morocco [‡]

^{*}AOA International Licensure Summary, December 2007.

Organization (WHO) defines osteopathic physician and osteopath as two separate entities. The WHO adopted the World Osteopathic Health Organization (WOHO) definitions to define these two entities. An osteopathic physician is defined as a medical doctor with full scope of medical practice. The WOHO defines an osteopath as a health care practitioner who practices based on the principles of osteopathic philosophy and osteopathic manipulative treatment (OMT).

In some foreign countries, the practice of osteopathy is unregulated. For example, in France it is illegal to practice osteopathy unless you are a medical doctor. To confuse matters, the Academy of Medicine in France does not recognize osteopathy as an area of medical practice. However, this law is not enforced and there are registration bodies for health professionals who hold a medical or allied health degree and practice as osteopaths. To be able to practice as an osteopath, one must withdraw their previous professional degree/title. US osteopathic physicians who graduated from an American Osteopathic Association (AOA) accredited

Countries with osteopathy/osteopathic physicians Table 2 most prominent

Country	Number of Osteopaths or Osteopathic Physicians	Population of Country
Australia	1400*	21,262,641 [¶]
England	4078 [†]	61,113,205 [¶]
New Zealand	350 [‡]	4,213,418 [¶]
United States	64,000 [§]	307,212,123 [¶]

^{*}Numbers as per the Australian Osteopathic Association as reported in June 2009.

Country	Education Standards
Australia	Five-year Bachelor and Master's degree combined*
Canada	Length of courses vary. Some consist of a 5-year, full time course, plus 2 years of research but must hold another allied health/medical degrees [†]
England	Length of course varies from 13 months (a program for licensed physicians) to 4-6 years both full time and part time, which enables the applicant to practice as an osteopath. [‡]
Germany	Neither the training in osteopathic medicine nor its exercise in Germany is subject to mandatory quality standards. A curriculum for physicians in osteopathic medicine in collaboration with an osteopathic-oriented college in the United States is offered.§
New Zealand Russia	Five-year Bachelor combined Master's degree [¶] A member of the Register can be a physician with Doctor of Osteopathy diploma issued by educational institutions of Russia or other countries and recognized by the Register. [∥]

wish to learn osteopathic techniques.

college of osteopathic medicine can practice solely with OMT in France, because they are not considered medical doctors. This practice is, however, still technically illegal.²

In Australia, New Zealand, Canada, and the United Kingdom, there are registration bodies to which osteopaths must apply once they finish their academic degrees to be able to practice. In these countries, registered osteopaths must practice under a national registration act, where they must meet requirements including those for continuing education to maintain registration.

Evolving practice rights for US-trained DOs worldwide

The AOA continues to advocate for US osteopathic physicians who graduated from an AOA-accredited college of osteopathic medicine to be recognized outside the United States and allowed full practicing rights. As noted before, these practice rights vary around the world. The AOA maintains a directory that is available to members on their website (http://www.do-online.org), which outlines the different practice rights in countries across the world and delineates

[†]Missions only. Five-year residency, supervised at all times by Mexican MD, working papers (for MDs and DOs).

[‡]No US MD/Dos.

[†]Numbers as per the UK's General Osteopathic Council as reported on their website as of June 2009.

[‡]Numbers as per the American Osteopathic Association as reported on their website dated May 2008.

[§]Numbers as per the Osteopathic Council of New Zealand as reported in June 2009. An additional 150 are registered but inactive as well.

[¶]Numbers as per the CIA's World Factbook in July 2009.

[‡]As per UK's General Osteopathic Council in July 2009.

[§]As per the German-American Academy of Osteopathy DAAO in

[¶]As per the Osteopathic Society of New Zealand in July 2009. As per Register of Osteopaths of Russia in July 2009.

Finland

Greece

Honduras

Hong Kong

Indonesia

Israel

Italy

Lebanon

Luxembourgh

New Zealand

Liberia

Panama

Russia

Taiwan

UK

Tanzania

Vietnam

Papua New

Guinea

Saudi Arabia

Table 4 Unlimited practice rights for US-trained osteopathic physicians*		
Country	United States DO requirements to practice	
Australia	Largely denied. However, a US osteopathic physician was recruited to head up an emergency department in the suburbs of Sydney and gained full licensure with the help of the hospital.	
Canada	Governed by province. Varies from unlimited rights to strictly OMM to no rights. Requirements also vary from taking tests to just applying.	
Central African Empire	Attend National Congress for Physicians annually. Apply in French or Sago only.	
Chile	Written examination in Spanish	
China	Short-term practice only	
Costa Rica	Contract work OK. Married to Costa Rican or resided in CR for 5 years OK. One-year internship and 1 year medical sanitary service	
Ecuador	Thesis in Spanish, 1-year internship in Ecuador	

Knowledge of Finnish

be fluent in Greek

Only if missionary

Hebrew.

Examination

Citizens only

Examination

physicians

Need US residency

Volunteer DOs OK.

definitive registration

Very difficult to obtain. Greek citizens only

or if in crucial need for specialist. Must

training (including internship/residency)

Two years social service, then apply for

Examination, externship, >5 years US

Need to be Israeli resident. Examination

(pass/fail) multiple choice. Fluent in

the job. Contract work OK.

Difficult to obtain, must be citizen

Case-by-case basis. General practitioner

primary care. Reimbursement issues.

Two DOs obtained licensure in the past.

Need sponsorship by hospital or business

private health entity (eg, hospital)

Must be recruited by government agency or

Linguistics examination, 1-year supervised

work for the National Health Service

Low to no wages for foreign-trained

One-year internship required

Full licensure if an Italian citizen cannot fill

the available scope of practice for US osteopathic physicians who graduated from an AOA-accredited college of osteopathic medicine who desire to work in certain countries. In some countries, that scope may be limited to OMT

*AOA International Licensure Summary, December 2007.

only or they may not be allowed to practice at all. Although the number of countries that allow full practicing rights is expanding, it is at a slow pace and most countries have special requirements to obtain licensure that are not equal to the requirements for allopathic physicians.

The AOA continues to promote full practicing rights for US osteopathic physicians who graduated from an AOA-accredited college of osteopathic medicine in foreign countries; however, they also state, "Further, it would be of great help to the AOA and other osteopathic physicians if the AOA Division of State Government Affairs were notified of the outcome of any inquiries. In addition, if correspondence from international health agencies is received, please forward copies for the files maintained at the AOA. This will help greatly with future inquiries. The AOA counts on its members to also pursue further advancement of practice rights and inform the AOA of any correspondence."

There are many examples of countries where advancement of practicing rights for US osteopathic physicians who graduated from an AOA-accredited college of osteopathic medicine are taking place. The UK requires the applicant to sit for a linguistics examination and complete one year of supervised work for the National Health Service/public health system, which is similar to the requirements for an MD wishing to work in the UK.²

In Canada, practice rights vary by province and there are no universities offering osteopathic medicine analogous to that in the United States. In Quebec and Ontario, universities typically offer the degree of Doctor of Osteopathy in Manual Practice (DOMP), but even that varies some. Some schools have even been known to give honorary DO degrees. Therefore, US osteopathic physicians who graduated from an AOA-accredited college of osteopathic medicine can practice in selected provinces on a case-by-case basis.² The problem is that although the government recognizes the right of US osteopathic physicians who graduated from an AOA-accredited college of osteopathic medicine to take the licensure examination, each province has not allowed them to be licensed.

Israel allows full practicing rights to US osteopathic physicians who graduated from an AOA-accredited college of osteopathic medicine. However, all physicians, both MD and DO, are required to become Israeli citizens or permanent residents if they are not already, pass a multiple choice medical examination, and be fluent in Hebrew.²

As previously stated, several countries state that they allow full practice rights for US osteopathic physicians who graduated from an AOA-accredited college of osteopathic medicine. But there are requirements that are often unrealistic and/or arbitrary, despite what the country may state initially or what may be listed on the AOA's International Licensing Summary. A specific example of this problem was presented by Michael Landrum, DO, who is board certified in neuromusculoskeletal medicine and is a US osteopathic physician who graduated from an AOA-accredited college of osteopathic medicine. In 2005, Dr Landrum attempted to practice in New Zealand, where osteopaths are

recognized for manual medicine only. Medical reimbursements to physicians in New Zealand are largely dependent on the government's socialized medicine structure. His desire was to gain full practice rights as a physician with a specialty in musculoskeletal medicine. Dr Landrum received "reasonable" assurance from the New Zealand Medical Council of his ability to be registered as a specialist. A panel of two men representing New Zealand musculoskeletal medicine felt differently, however, and he was unable to be registered as a specialist. Although he received full practice rights as a physician in New Zealand, he did not receive recognition as a specialist and only received reimbursement for his services based on a generalist's fee schedule.³

One of the main problems met by US osteopathic physicians who graduated from an AOA-accredited college of osteopathic medicine when applying for licensure internationally is a largely conservative medical profession that is resistant to other paradigms of medicine. At the July 2008 AOA House of Delegates, it was proposed and passed that the AOA recognizes the right of foreign countries to change the DO designation in United States osteopathic physicians who graduated from an AOA-accredited college of osteopathic medicine for that country to better designate them as physicians. This reaffirmed the DO designation as the only designation recognized in the United States but it has also been met with some controversy because it would allow that designation to be changed outside the United States. Changing the letters of designation would not alter the core philosophy of osteopathic physicians wanting to practice medicine overseas. The designation for DOs was changed successfully in the United States from Doctor of Osteopathy to Doctor of Osteopathic Medicine. The names of many schools have changed over the years. Why would this be any different? The core philosophy of a US-trained osteopathic physician will not change if the degree letters change. The physician would be an osteopathic physician who has made this choice to be able to practice in another country, not a physician who pays a fee to change his designation like those in California in the 1960s. This change would differentiate a US osteopathic physician who graduated from an AOA-accredited college of osteopathic medicine from an internationally trained osteopath who strictly practices manual medicine.

Osteopathic organizations

WOHO was founded in 2004. It allows individual membership of qualified osteopaths and osteopathic physicians. It has also developed guidelines for international osteopathy, fosters communication between the different osteopathic paradigms, and has developed educational standards for the practice of osteopathy worldwide. Another important osteopathic organization, founded by the AOA in 2003, is the Osteopathic International Alliance. Rather than individual

membership, it allows osteopathic professional organizations to join, such as the Australian Osteopathic Association and the General Osteopathic Council in the UK. Its mission is to foster DO acceptance worldwide and obtain full practicing rights for US osteopathic physicians who graduated from an AOA-accredited college of osteopathic medicine.

One of the missions for osteopathic medicine and osteopathy worldwide is to improve the content of osteopathic research. The Osteopathic Research Center (ORC) in Texas conducts experimental research in several areas of osteopathic medicine. The International Consortium of Advancement in Osteopathic Research presents the latest research in osteopathy at a conference each biennium.

Personal view—Andrew Kusienski, DO

I currently serve as an assistant professor of Osteopathic Principle and Practice at Nova Southeastern University College of Osteopathic Medicine (NSUCOM). I am a graduate of an AOA-accredited college of osteopathic medicine and I am board certified in family medicine and OMT with a certificate of added qualification in sports medicine. In August of 1999, I completed a clinical rotation as a medical student in Osteopathic Manipulative Medicine in Melbourne, Australia, at what is now Victoria University. In Australia, the osteopathic program is a combined five-year undergraduate/postgraduate degree (medicine is a similar program but is 6 years). I learned about the rotation in the American Academy of Osteopathy journal. I was the first student from my school to go and helped initiate the discussion between the schools. Although I was unsure of what to expect when I rotated there, I was very impressed by their level of education and experience. The main curricular deficiency I saw was their lack of non-OMM training, which is really not a deficiency to the profession there because medicine is not their degree. I witnessed a group of welltrained osteopaths who were taught the same osteopathic techniques and principles, with enough medicine exposure to truly understand how to make the viscerosomatic connection.

Personal view—Yasmin Qureshi, MPT, MHS (osteopathy)

I am an Australian trained osteopath also employed as an assistant professor of Osteopathic Principle and Practice at NSUCOM. I have experienced the different cultures of osteopathy and osteopathic medicine first hand. In the United States, internationally trained osteopaths are deemed as having "limited practicing rights." This is an interesting view to me because as an internationally trained osteopath, I do not see myself as being limited in what I am able to accomplish. The fact is that the practice of osteopathy is what it is: a paradigm of manual therapy, with osteopathic

principles and treatment techniques and specific practice rights. It is not a branch of medicine and nor does it aspire to be. We present ourselves as highly-qualified osteopaths practicing osteopathy and not medicine.

In Australia, all health professions degrees including medicine, chiropractic, and osteopathy are all either Bachelor or Master's programs. All three professions are deemed "primary care" professions, which is why there is a large medical curriculum including pharmacology and clinical diagnosis in the chiropractic and osteopathic models of manual therapy. Osteopaths are trained to identify medical issues to determine when the patient needs to be referred to a medical doctor. A reason for this is the lengthy treatment time and contact an osteopath may have with a patient on a regular basis. The federal government allows all primary care practitioners in Australia to be called "doctor" even though only doctoral degrees awarded are PhD degrees. In Australia, there are no clinical doctorates.

What I enjoy about the way osteopathic manipulative treatment is taught in the United States is that it is taught as a protocol that lends itself to be adjunctive to the practice of medicine. All of the basic somatic dysfunction diagnostic methods and treatment techniques are taught and reinforced. Some of the more detailed manipulative techniques are presented in the last semester of preclinical education so that if a student has a desire to delve further into a certain technique or topic, they can do so. The student graduates able to competently diagnose and treat somatic dysfunction. It is especially useful to those wanting to pursue a primary care specialty.

Conclusion

A. T. Still's original vision of osteopathic medicine was a reaction to the often caustic medical treatments of his time. As the practice of medicine and science has evolved, OMT is currently seen as a complementary arm. The percentage of OMT used by US osteopathic physicians is not a fixed number; however, it is lower than ideal. ^{4,5} The profession's response to this is multifaceted and includes the creation of

COMLEX-2 PE (performance evaluation), curricular changes, the expansion of osteopathic residencies, and the implementation of core competencies in predoctoral and graduate medical education.

The four tenets of osteopathic medicine were recently affirmed by the Educational Council on Osteopathic Principles to state:

- The body is a unit: the person is a unit of the body, mind, and spirit.
- 2. The body is capable of self-regulations, self-healing, and health maintenance
- 3. Structure and function are reciprocally interrelated.
- 4. Rational treatment is based on an understanding of the basic principles of body unity, self-regulation, and the interrelationship of the structure and function.

Internationally, the four tenets are essentially the same. Given the low numbers of US osteopathic physicians who graduated from an AOA-accredited college of osteopathic medicine using OMT,⁴ international osteopaths are playing a large part in carrying on A. T. Still's original work in manipulation. In many ways, they are closer to A. T. Still's original vision of what osteopathy is as expressed by manual medicine. Thankfully, today US osteopathic physicians have developed into something that A. T. Still may have not foreseen, thus combining the best of both worlds.

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