Abstract

Cranial osteopathy (CO) is not well-accepted or commonly practiced outside of osteopathic medicine and is even a controversial subject within the osteopathic realm. This survey sought to assess students’ attitudes toward, opinions of, and experiences with CO. Over 500 osteopathic students were surveyed.

The survey demonstrated that students are not convinced of the basic underlying tenets of CO, and many find it to be implausible.

Less than half of students see CO as being useful in the diagnosis and treatment of symptoms and disease. Upon graduation, students say they will likely not use it in practice.

While practicing, a significant portion of students never felt any motion of the cranial bones, and of those that did, few felt confident with what they were palpating. Over a third of students have failed to be convinced that the cranial bones even allow for movement.

Students feel that CO has yet to be sufficiently tested experimentally and instead relies on anecdotal evidence. Students took issue with the availability and credibility of references, resources, and literature. CO is not scientific and is not evidence-based medicine, say a majority of students.

Students think that CO should be removed from COMLEX examinations and they tend to think that there should be a decreased emphasis of CO in the curriculum, with many students wanting CO to be offered only as an elective. Students want more curricular emphasis on the spine, sacrum, and pelvis.

The vast majority of students believe that CO is controversial, and most thought that cranial osteopathy is hurting the reputation of the DO profession.

Please see the back of this page for more-detailed results.

More information

cranialosteopathy.wordpress.com
Who will use cranial osteopathy in practice?
70.6% of students said they would use cranial osteopathy never or next to never.

Students’ beliefs of the fundamental aspects of the mechanisms and modalities of cranial osteopathy.
For purposes of the survey, we simplified the subject of cranial osteopathy into the following five statements and asked students to what extent they think evidence exists to support each of them. Most non-neutral students aren’t convinced of any of the fundamental tenets of cranial osteopathy.

1) Glial cells rhythmically contract.
   - 39.3% disagree
   - 18.6% agree
2) CSF palpably fluctuates at a rate/rhythm independent of the heart/respiratory rate.
   - 36.7% disagree
   - 34.3% agree
3) Major sutures remain unfused, permitting palpable motion of the calvarium.
   - 47.4% disagree
   - 26.3% agree
4) The motions of the cranium can be readily assessed and diagnosed.
   - 54.2% disagree
   - 20.4% agree
5) Treatment of errant cranial motions can alleviate a variety of symptoms/illnesses.
   - 47.0% disagree
   - 26.4% agree

Most non-neutral students (45.5%) say they find cranial osteopathy to be implausible. 37.3% find it plausible.

Items pertaining to student experiences with the movement of the cranial bones
A significant portion of students never felt any movement of the cranial bones, and of those that did, few felt confident with what they were palpating. Over a third of students have failed to be convinced that the cranial bones allow for movement.

36.3% of students think the cranial bones are immobile.
40.2% of students never felt any movement of the cranial bones.
Only 14.7% of students were confident with their diagnoses.
62.1% of students failed to feel motions that the professors/teaching assistants felt.
50.8% of students believe that skilled practitioners can feel movements of the cranial bones.

Students’ assessments of the validity of cranial osteopathy
Assessing availability and credibility of references:
Assertions made in class were linked to outside references/sources that were credible.

Items pertaining to the evidence to support cranial osteopathy:
70.1% of students think that cranial osteopathy relies on anecdotal evidence.
72.5% of students think that the validity of cranial osteopathy has not been sufficiently tested experimentally.
According to principles of evidence-based med., studies used to support CO are weak.

General statements:
Cranial osteopathy is not scientific, say 55.2% of students.
Cranial osteopathy is not evidence-based medicine, say 64.3% of students.

Curriculum and COMLEX
31.2% of students would like to see cranial osteopathy only offered as an elective course at their respective schools.
44.1% of students think cranial osteopathy should be removed from the COMLEX examinations.

Where should instruction time instead be focused?
Students want more time spent on the basics of osteopathic manipulation – our “bread-and-butter.” In rank-order, students would rather have more emphasis on: 1.) Lumbar spine 2.) Cervical spine 3.) Thoracic spine 4.) Sacrum 5.) Pelvis

In light of studies showing cranial osteopathy to have poor inter-rater reliability...
...only 29.8% of students think that cranial bones can accurately diagnosed. Over one third of students think that the diagnostician must be imagining the movement that he or she feels.

What role should cranial osteopathy play in the practice of medicine?
While most non-neutral students aren’t ready to dismiss cranial osteopathy as being therapeutically useless, most of the non-neutral students do not see cranial osteopathy as serving a useful role in the diagnosis and treatment of symptoms and disease.
Cranial osteopathy is efficacious and has some proven therapeutic value.
Cranial osteopathy is useful in the diagnosis/treatment of symptoms/disease.

Cranial osteopathy and the credibility of our profession
Students are concerned about how a controversial topic such as cranial osteopathy affects our professional reputation.
61.6% of students think that cranial osteopathy hurts the credibility of DOs.
86.2% of those surveyed think cranial osteopathy is controversial. Only 3.8% thought it wasn’t controversial.

For the full results of the survey, visit cranialosteopathy.wordpress.com
(View data from DMU DO-13 vs. DMU DO-11/DO-12 vs. SOMA, as well as agree/strongly agree vs. disagree/strongly disagree.)

Thank you to all that participated in this survey or assisted with its creation.