



June 20, 2019

Chairperson Vaupel and esteemed members of the House Health Policy Committee:

Good Morning. My name is Jennifer Beahan, I am the Executive Director of Center for Inquiry Michigan, the local state branch of the international non-profit Center for Inquiry. CFI works to advance reason, science, and secular values in public affairs through issue based advocacy at all levels of government to ensure evidence, science, and compassion—rather than superstition, pseudoscience, or prejudice—guide public policy.

Today I speak on behalf of myself as a constituent of the 75th District, and on behalf of the thousands of members and supporters of CFI Michigan that live across the state.

I am here to express the strongest opposition that I can to HB 4710, currently before this Committee, to change the profession of acupuncturist from a registered profession to a licensed profession. I hope that each of you serving on the Health Policy Committee will agree that medicine should be based on solid scientific evidence that shows that the interventions and treatments used to treat our fellow citizens are effective and safe.

Thus, state licensure should only be granted to medical professions whose practices are supported by science and evidence. This is essential for two reasons: First, to protect the public from dubious and potentially dangerous practitioners and, second, because state licensure confers the authority of the state, with all the respectability that provides, on the profession.

Contrary to what its practitioners and supporters claim, acupuncture is supported by neither science nor evidence. Acupuncture has no basis in human physiology or science. "Meridians" used by acupuncturists to guide the insertion of their needles have no basis in anatomy, and "qi," ("Chi") the "life energy" whose flow, acupuncturists claim, is unblocked or redirected, **has no basis in physics or chemistry and has never been detected or characterized.**

It is claimed that acupuncture is effective for a wide variety of conditions with little or no relationship in pathophysiology or root cause, which from a scientific perspective, is a huge red flag that it cannot be shown to work for anything, other than nonspecific effects. Indeed, there is a reason why acupuncture has been referred to as a "theatrical placebo," because that's what it is. A link in the printed copy of this testimony will take you to an article discussing this:

<https://drive.google.com/file/d/0B8coQOLjg-GYmZDMWZoaERpMUVPdWNsU19hLVJqNUxLZGw4/view?usp=sharing>

The FDA uses for approving a new treatment is that it be more effective than placebo. Although there are individual studies that report placebo to be better than placebo for some ailments, when you critically examine the totality of the evidence, the effects of acupuncture are indistinguishable from sham acupuncture.

Basically, it doesn't matter where you stick the needles, and it doesn't even matter if you stick the needles in. Consistent with the lack of specificity of acupuncture effects, there is a 2009 German study [Arch Intern Med.2009;169(9):858-866] that shows that twirling toothpicks against the skin is just as effective as "true" acupuncture. (<https://edzardernst.com/2017/12/a-new-comprehensive-review-of-acupuncture-turns-out-to-be-an-orgy-in-wishful-thinking/>)

If all this bill were to license acupuncturists, that would be bad enough, but it goes beyond that. If passed, it would expand the scope of practice to include moxibustion, homeopathy (which has nothing to do with acupuncture or Traditional Chinese Medicine), acupressure, cupping, and dermal friction among other "treatments."

Homeopathy, in particular, is pure quackery based on pseudoscience and mystical thinking that has nothing to do with acupuncture. Acupuncture originated in Asia, although it is unclear how long ago; homeopathy originated independently in Germany in the late 1700s and has never been part of traditional Chinese medicine. From a historical and factual point of view, to claim, as this bill does, that homeopathy is part of "East Asian medicine" is completely inaccurate.

Homeopathy is a scientifically discredited form of treatment that originated in eighteenth century Germany. In 2017, the Federal Trade Commission (FTC) warned homeopathy marketers that they may be found to be illegally misleading consumers unless they state clearly on homeopathy product labels that "1) there is no scientific evidence that the product works; and 2) the product's claims are based only on theories of homeopathy from the 1700s that are not accepted by most modern medical experts."

The other treatments encompassed by the scope of practice expansion granted acupuncturists by this bill are scarcely any better in terms of their evidence base. Traditional Chinese medicine, for instance, is based on prescientific beliefs about how the body works not validated by science and includes such diagnostic modalities as "tongue diagnosis" and "pulse diagnosis," neither of which is validated by science. And yet other treatments in the list such as therapeutic exercise, dietary counseling, and manual therapy are distinct therapies that, rather than being lumped under "East Asian Medicine Techniques," should be evaluated independently for licensure for based on the scientific evidence available regarding their safety and effectiveness.

Pseudoscientific medical treatments cause substantial harm to patients. In many cases, these treatments jeopardize patient health. But even when disproven treatments are merely ineffective, they waste valuable time that should be used to diagnose and treat a patient's ailments before they worsen. Research published in peer-reviewed medical journals has shown that even when "complementary" medical treatments are marketed for use in conjunction with science-based medicine, many consumers use these treatments as wholesale substitutes for

science-based medicine, often tragically leading to significantly higher mortality rates from treatable illnesses, most notably from various forms of cancer.

In addition to the issue of state licensure conferring respectability to pseudoscience, a major problem with licensing a specialty that is not based in science is that it will be members of that specialty who form a board to oversee the practitioners of that specialty, which means that there will be no scientific standards regulating that specialty. In other words, acupuncture will be what acupuncturists claim that it is, and the standard of care will be what acupuncturists dictate it to be. Neither will be based in science, and, contrary to the intent of the bill, the public will not be protected from bad actors any more than they are by the present system. In addition, the reason practitioners of unconventional specialties like acupuncture so crave state licensure is that it is the first step to requiring insurers to pay for their services. This, if it comes to pass (as it likely will if acupuncture is licensed), will result in a diversion and waste of precious health care resources to pay for ineffective therapies.

In conclusion, acupuncture does not meet the minimal requirements for a medical specialty to be licensed by the state. It is not based in science, but rather in prescientific mysticism; there is no clear standard of care to guide regulation; there is no clear standard of education for practitioners; and the available scientific evidence is most consistent with its effects being all nonspecific or placebo effects, an expected finding given the scientific implausibility of the practice. Worse, HB 4710 would broaden the scope of acupuncturists to include the use of modalities that, like homeopathy, can only be described as pure quackery.

I urge you and the committee to reject this bill and not send it to the full House for consideration.

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