

BRITISH COLUMBIA HUMANIST ASSOCIATION

422 Richards St, Suite 170
Vancouver, BC V6B 2Z4

(604) 265-9298
bchumanist.ca
info@bchumanist.ca



FEEDBACK – REGULATING HEALTH PROFESSIONALS

By Ian Bushfield, Executive Director

January 9, 2020

Enshrine evidence-based medicine in regulated healthcare professions

The BC Humanist Association supports efforts to ensure health regulatory colleges put the public interest and patient safety ahead of professional interest. To achieve these goals, we must ensure our healthcare professionals base their practice on the best available evidence. We therefore argue that the public interest and patient safety cannot be reconciled with the continued recognition and certification of professions that are based on unsupported hypotheses, questionable evidence or whose practitioners routinely promote dangerous and pseudoscientific views. Specifically, we call on the Government to take this opportunity to end the recognition of chiropractors, naturopaths, acupuncturists and Traditional Chinese Medicine practitioners.

Among the key objectives guiding the steering committee is improving “patient safety and public protection.” To achieve this aim, our health professions regulation must rely on the best available scientific evidence. So-called complementary or alternative medicines rely on hypotheses that are not supported by scientific research. This includes chiropractic, naturopathy, Traditional Chinese Medicine and acupuncture, each of which presently has a recognized College. As we detail in the addendum below, these pseudoscientific approaches to treating ailments are, at their best, ineffective and, far too often, harmful. The regulation of pseudoscience grants it a false authority that it has failed to earn through demonstrating its efficacy through controlled clinical trials and the peer review process.

In contrast, evidence-based medicine “is the conscientious, explicit, judicious and reasonable use of modern, best evidence in making decisions about the care of individual patients.”¹ Rather than relying on appeals to tradition or dogma, it asks healthcare professionals to continually re-evaluate their practice and to change it in light of new information. In particular, the movement recognizes a hierarchy of evidence,

¹ Masic I, Miokovic M, Muhamedagic B. Evidence based medicine - new approaches and challenges. *Acta Inform Med.* 2008;16(4):219–225. doi:10.5455/aim.2008.16.219-225

with systematic reviews and meta-analyses as stronger tools than individual case studies or even standalone clinical trials.

By operating based on pseudoscientific principles and routinely failing to demonstrate the efficacy of their practices, chiropractic, naturopathy, Traditional Chinese Medicine and acupuncture operate in opposition to the approaches taken by other recognized health professions. While the scrutiny applied by more evidence-based professions in a consolidated regulatory college system will undoubtedly temper some of the more egregious claims made by some individual practitioners, it fails to address the pseudoscientific bases of these practices.

To accomplish the committee's three key objectives of improving patient safety and public protection, improving efficiency and effectiveness of the regulatory framework and increasing public confidence through transparency and accountability, evidence-based medicine, and not a continued protection for pseudoscientific practices, must be placed at the centre of any regulatory reforms.

In advocating this approach, we echo the December 2018 recommendation from Harry Cayton's preceding inquiry into the Health Professions that "An evidence based occupational risk assessment process should be developed and implemented to identify the potential risks of harm from occupations within the health sector and to consider the appropriate mitigations."² Notably, Cayton suggested in follow-up comments to the media that the current system amounts to "whatever profession has lobbied hard enough...has managed to win itself a college" and some professions could be deregulated.³ It should be self-evident that regulating health professions on the basis of each practice's political acumen risks undermining patient safety.

Finally, while our attention in this response has targeted those regulated fields of complementary and alternative medicine, we also recognize that there is far more work to be done to ensure the principles of evidence-based medicine in every health profession. Our previous work on addictions recovery options highlights one area in urgent need of greater evidence-based approaches.⁴

While the consultation paper does not consider the deregulation of certain professions, we are optimistic that, as a first step, amalgamating regulatory colleges presents the opportunity for oversight bodies to apply greater skepticism to the claims made by many of these practitioners. To ensure this oversight meets its key objectives, evidence-based medicine must be a core mandate of each of the new colleges.

² Cayton H. *An Inquiry into the performance of the College of Dental Surgeons of British Columbia and the Health Professions Act*. Dec 2018.

³ Lindsay B. Rip up current system and start over, recommends review of B.C.'s professional health colleges. *CBC News*. Apr 11, 2019. <https://www.cbc.ca/news/canada/british-columbia/bc-health-professional-regulation-report-1.5094180> Accessed: Jan 7, 2020.

⁴ Ensuring choice in addictions recovery. BC Humanist Association. Aug 20, 2018. https://www.bchumanist.ca/ensuring_choice_in_addictions_recovery

Literature review

A thorough scientific review of the claims behind chiropractic concludes that it has largely not been shown to be an effective treatment.⁵ The “possible exception” in that review is for back pain, for which two Cochrane systematic reviews found chiropractic to be “no more effective” than other therapies.^{6,7} Furthermore, manipulation has been found to have frequent negative side effects and serious complications.⁵ Another meta-review found that “collectively these data fail to demonstrate convincingly that spinal manipulation is an effective intervention for any condition.”⁸ Studies frequently demonstrate that excessive x-ray and imaging tests are requested by the chiropractors without demonstrating significant medical value or significant demonstrated need.^{9,10} In addition to the practice having no basis in science and showing no therapeutic value, reports have shown that multiple BC chiropractors actively undermine other public health measures by perpetuating falsehoods about vaccinations or promote other pseudoscientific treatments like homeopathy.¹¹

Naturopathy is based on theories that have little to no basis in science. As it is not predicated on falsifiable claims, it attempts to avoid the scientific scrutiny we expect to be applied to other treatments.¹² Similar to chiropractors and other alternative medicine practitioners, it’s well documented that some naturopaths antagonize public health interventions including vaccinations.¹³ Where naturopathy has demonstrable benefits, those practices can and are incorporated by evidence-based healthcare professions.

⁵ Ernst E. Chiropractic: A Critical Evaluation. *Journal of Pain and Symptom Management*. 2008;35(5):544-562. doi:10.1016/j.jpainsymman.2007.07.004

⁶ Rubinstein SM, Terwee CB, Assendelft WJJ, de Boer MR, van Tulder MW. Spinal manipulative therapy for acute low-back pain. *Cochrane Database of Systematic Reviews*. 2012;9. Art. No.: CD008880. doi:10.1002/14651858.CD008880.pub2.

⁷ Rubinstein SM, van Middelkoop M, Assendelft WJJ, de Boer MR, van Tulder MW. Spinal manipulative therapy for chronic low-back pain. *Cochrane Database of Systematic Reviews*. 2011;2. Art. No.: CD008112. doi:10.1002/14651858.CD008112.pub2.

⁸ Posadzki P, Ernst E. Spinal manipulation: an update of a systematic review of systematic reviews. *N Z Med J*. 2011;124(1340):55-71.

⁹ Jenkins HJ, Downie AS, Moore CS, French SD. Current evidence for spinal X-ray use in the chiropractic profession: a narrative review. *Chiropr Man Therap*. 2018;26:48. Published 2018 Nov 21. doi:10.1186/s12998-018-0217-8

¹⁰ Ammendolia C, Taylor JAM, Pennick V, Côté P, Hogg-Johnson S, Bombardier C. Adherence to radiology guidelines for low back pain: A survey of chiropractic schools worldwide. *Journal of Manipulative and Physiological Therapeutics*. 2008;31(6):412-418. Doi:10.1016/j.jmpt.2008.06.010

¹¹ Lindsay B. 50 B.C. chiropractors refuse to remove misleading claims from websites, face possible discipline. *CBC News*. Nov 16, 2018. <https://www.cbc.ca/news/canada/british-columbia/50-bc-chiropractors-face-possible-discipline-misleading-claims-1.4909071> Accessed: Jan 7, 2020.

¹² Barrett S. A Close Look at Naturopathy. *Quackwatch*. Nov 26, 2013. <https://www.quackwatch.org/01QuackeryRelatedTopics/Naturopathy/naturopathy.html> Accessed: Jan 7, 2020.

¹³ Lindsay B. Complaints levelled at B.C. naturopaths offering ‘complete elimination’ of autism. *CBC News*. May 24, 2018. <https://www.cbc.ca/news/canada/british-columbia/complaints-levelled-at-b-c-naturopaths-offering-complete-elimination-of-autism-1.4675461> Accessed: Jan 7, 2020.

Traditional Chinese Medicines (TCM), similar to naturopathy, is based on hypotheses which largely have no basis in science. Systematic reviews of TCM have found few studies in support of its effectiveness or value.^{14,15} Possibly the most popular form of TCM is acupuncture, which has been studied extensively and shown largely inconsistent results.¹⁶ In particular, the underlying theory behind acupuncture is based on concepts such as qi (life energy), meridians (qi pathways through the body) and special acupuncture points, none of which are supported by a contemporary scientific understanding of anatomy. Further, “sham acupuncture” studies debunk the importance of elements that ought to be fundamental for acupuncture to work according to its underlying theory, with a 2013 review finding that “when comparing acupuncture to sham controls, there was little evidence that the effects of acupuncture on pain were modified by any of the characteristics evaluated, including style of acupuncture, the number or placement of needles, the number, frequency or duration of sessions, patient-practitioner interactions and the experience of the acupuncturist.”¹⁷

About the BC Humanist Association

The British Columbia Humanist Association has been providing a community and voice for Humanists, atheists, agnostics, and the non-religious of Metro Vancouver and British Columbia since 1984. Our values include that “Humanism advocates for the application of the methods of science and free inquiry to the problems of human welfare.”¹⁸ In our position statement on the subject, we describe so-called complementary and alternative medicines and treatments as unethical.¹⁹

As it is beyond our organizational expertise, we are refraining from answering the specific questions posed in the consultation paper.

¹⁴ Shang A, Huwiler K, Nartey L, Jüni P, Egger M. Placebo-controlled trials of Chinese herbal medicine and conventional medicine—comparative study. *International Journal of Epidemiology*. 2007;36(5):1086–1092. doi:10.1093/ije/dym119

¹⁵ Zhang F, Kong F, Zhang Y, Li S-C. Evaluation of impact on health-related quality of life and cost effectiveness of Traditional Chinese Medicine: A systematic review of randomized clinical trials. *The Journal of Alternative and Complementary Medicine*. 2012;18(12) doi:10.1089/acm.2011.0315

¹⁶ Colquhoun D, Novella SP. Acupuncture is theatrical placebo. *Anesthesia & Analgesia*. 2013;116(6):1360-1363. doi:10.1213/ANE.0b013e31828f2d5e

¹⁷ MacPherson H, Maschino AC, Lewith G, et al. Characteristics of acupuncture treatment associated with outcome: an individual patient meta-analysis of 17,922 patients with chronic pain in randomised controlled trials. *PLoS One*. 2013;8(10):e77438. doi:10.1371/journal.pone.0077438

¹⁸ BC Humanist Association. Amsterdam Declaration 2002. https://www.bchumanist.ca/issues_summary#3.4

¹⁹ BC Humanist Association. Complementary and Alternative Medicine. *Issues Summary*. August 13, 2018. https://www.bchumanist.ca/issues_summary#3.4