# Acupuncture, ACC and the Medicines Act

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#### **ABSTRACT**

Acupuncture is covered under the Accident Compensation (Liability to Pay or Contribute to Cost of Treatment) Regulations 2003, and is therefore eligible for Accident Compensation Corporation payments for the treatment of personal injuries. This study searched New Zealand acupuncturists' websites for therapeutic claims that may breach Section 58(1)(a) of the Medicines Act. A search of acupuncturists' websites shows that many claim to be able to treat a wide range of conditions, despite a lack of evidence showing the efficacy of acupuncture in the treatment of those conditions. Practitioners and owners of websites likely to be in breach of the Medicines Act include many committee members from acupuncture's professional bodies.

cupuncture is one of the most popular forms of 'alternative' health therapy in New Zealand.<sup>1</sup>

It is often used for the treatment of personal injuries, and New Zealand's Accident Compensation Corporation (ACC) spent \$30 million on acupuncture treatments from July 2015 to June 2016 (S Melville, personal communication, July 26, 2016), an increase of \$4 million from \$26 million the year before.<sup>2</sup>

Gilbey et al noted there are around 17,000 published articles on acupuncture. They concluded that acupuncture may be efficacious for some types of pain relief, as well as for nausea and vomiting.3 However, the authors of this meta-review noted that there was "insufficient evidence to make positive recommendations", and suggested that the quality of the studies, even for these conditions, was poor. The UK's National Institute for Health and Care Excellence (NICE) no longer recommends using acupuncture for the treatment of any health conditions other than for some types of headaches (K Summerscales, personal communication, December 6, 2017).4

Further, concepts such as qi, meridians and acupuncture points are not based on evidence,<sup>5</sup> and it generally does not matter where acupuncture needles are inserted.<sup>6</sup> There is also an issue of positive acupuncture publication bias in a number

of countries.<sup>7</sup> Many acupuncture studies will show small improvements, but any small improvement could well be due to the placebo effect<sup>8</sup>—particularly when subjects and practitioners are not blinded.<sup>9</sup>

The two main professional bodies for acupuncture are Acupuncture NZ and The NZ Acupuncture Standards Authority (NZASA). Between them they oversee the majority of registered acupuncturists for New Zealand. If an acupuncturist is registered with either of these two bodies, they can receive ACC payments under the Accident Compensation (Liability to Pay or Contribute to Cost of Treatment) Regulations 2003. In rare instances, osteopaths and physiotherapists who perform acupuncture are registered with the Physiotherapy Board, the Osteopathic Council or the Medical Council of New Zealand.

Acupuncturists are unable to lodge ACC claims directly, and require a medical GP, osteopath or physiotherapist to do this on their behalf. In 2015, GPs logged the majority (53%) of ACC claims that resulted in acupuncture treatment, out of a total of 58,681 claims.<sup>11</sup>

Acupuncture NZ advocates that acupuncture, "can be used to treat an enormous variety of conditions from sporting injuries to digestive upsets or even the common cold". They also have a list of conditions which can be treated with



acupuncture based on "recommendations from the World Health Organization".13 However, O'Sullivan et al explain that the WHO report "was withdrawn in March 2014, in response to substantial evidence contradicting the WHO's advice". They found 27% of Australian acupuncturists' websites quote from withdrawn WHO evidence.14 The quoted statement from Acupuncture NZ is therefore misleading, and misleading claims from practitioners have been successfully challenged in the past. From October 2012 to April 2016, 14 Advertising Standards Authority (ASA) complaints were laid against acupuncturists for making inappropriate claims regarding the therapeutic benefits of their treatment. All but one of the complaints were upheld or settled.15

Despite this, there appear to be no studies examining the explicit or implicit claims made on New Zealand-based acupuncture websites which might have the potential to mislead first-time users of acupuncture services.

The purpose of the current study was therefore to investigate the websites of acupuncture practitioners in New Zealand, regarding direct or indirect claims of being able to assist with conditions that are listed under Section 58(1)(a) of the Medicines Act to see if therapeutic claims that may be considered inappropriate are a feature of the websites of companies and professionals offering acupuncture services.

# Methods

In August 2016, Daniel Ryan searched for the websites of acupuncture clinics that were potentially in breach of Section 58(1) (a) of the Medicines Act. This section of the Medicines Act was chosen as it prohibits the publication of advertisements claiming the ability to prevent, mitigate or cure a range of serious diseases:

"Subject to section 60, no person shall publish, or cause or permit to be published, any medical advertisement that—directly or by implication claims, indicates, or suggests that medicines of the description, or medical devices of the kind, or the method of treatment, advertised will prevent, alleviate, or cure any disease, or prevent, reduce, or terminate any physiological condition

specified, or belonging to a class of disease or physiological condition specified, in Part 1 of Schedule 1;...

Alcoholism, Appendicitis, Arteriosclerosis, Arthritis, Baldness, 'Blood pressure, disorders of', 'Bust, underdevelopment of', Cancer, Cataract, 'Central nervous system, disorders of', Diabetes, Diphtheria, Dropsy, Epilepsy, Gallstones, kidney stones, bladder stones, Gangrene, Glaucoma, Goitre, Heart disease, Infertility, Leukemia, 'Menopause, disorders of', 'Menstrual flow, disorders of', Mental disorders, Nephritis, Pernicious anaemia, Pleurisy, Pneumonia, Poliomyelitis, 'Prostate gland, disorders of', Septicaemia, Sexual impotence, Smallpox, Tetanus, Thrombosis, Trachoma, Tuberculosis, Tumours, Typhoid Fever, Ulcers of the gastro-intestinal tract, Venereal diseases."16,17

Two advanced searches were used to find any of the terms in the Medicines Act listed above, along with the word 'acupuncture'; these focused on New Zealand sites only, and removed any mention of 'animal' or 'vet'. Two searches were required because there is a maximum limit on the number of characters in the text of a Google search. Sponsored links and social media pages were not included. A targeted search against websites where Acupuncture NZ or NZASA Council members were listed as practitioners was also included. The two search queries used were:

site:nz acupuncture Alcoholism OR Appendicitis OR Arteriosclerosis OR Arthritis OR Baldness OR 'Blood pressure' OR Bust OR Cancer OR Cataract OR 'Central nervous system' OR Diabetes OR Diphtheria OR Dropsy OR Epilepsy OR Gallstones OR 'kidney stones' OR bladder stones OR Gangrene OR Glaucoma OR Goitre OR 'Heart disease' OR Infertility OR Leukemia -animal -vet

site:nz acupuncture 'Mental disorder'
OR Menopause OR Menstrual OR Nephritis
OR Pernicious OR anaemia OR Pleurisy OR
Pneumonia OR Poliomyelitis OR 'Prostate
gland' OR Septicaemia OR 'Sexual impotence'
OR Smallpox OR Tetanus OR Thrombosis OR
Trachoma OR Tuberculosis OR Tumours OR
'Typhoid Fever' OR 'Ulcers gastro-intestinal
tract' OR Venereal -animal -vet

For each site that appeared in the search results for containing a reference to one or more of the relevant medical conditions, a



manual reading was performed of the site's pages to ensure that a therapeutic claim was definitely being made, and if the claim was in the form of a testimonial. Words whose use were deemed to constitute 'therapeutic' claims were 'prevent', 'alleviate', 'cure', 'reduce' and 'terminate'. Website content was explored by clicking every link that was found, up to a maximum of 40 pages and documents per website. This exploration was aided by a Google Chrome plugin called MultiHighlighter, which highlighted the relevant medical terms.

This search was in no way exhaustive; as the flow diagram (Figure 1) shows, 98 sites were found from the Google search, and a further eight were independently investigated because they belonged to board members of either the NZASA or Acupuncture NZ. One website was removed as it was not a New Zealand company despite using a .nz domain. Three sites were removed as the companies were no longer in business. After these exclusions, 102 eligible websites remained.

These 102 websites were monitored periodically from August 2016 until January 2017 for any changes; during this time, only minor changes were noticed. One business had closed their website during this period, and so the site was removed from the list.

To work out the total percentage of likely breaching websites found for Acupuncture NZ and the NZASA, the total number of New Zealand acupuncturists' websites needed to be estimated. To calculate this estimate, website URLs and business names were collected from member listings on the websites of Acupuncture NZ and the NZASA. Missing website URLs were filled in by manually looking up business names in a Google search. Duplicated businesses, websites that didn't mention acupuncture, non-New Zealand businesses and websites that were offline were all removed. The NZASA's records don't require practitioners to enter a practice name, which may skew some of the results.

# Results

The result of this effort was a list of 101 websites for acupuncture clinics based in New Zealand where at least one claim was made to be able to prevent, treat or cure a condition listed in the Medicines Act under Schedule 1. The majority of acupuncturists were registered with a New Zealand professional organisation 98/101 (97%), with some being registered to more than one.

Of the registered acupuncturists, Acupuncture NZ's members accounted for

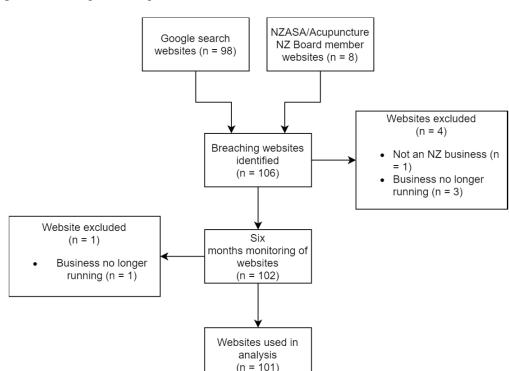


Figure 1: Flow diagram of acupuncture website search.

72 of the 101 websites that were found, the NZ Acupuncture Standards Authority's members were responsible for 28 websites, the Physiotherapy Board's members owned four websites, the Osteopathic Council's members owned four websites and the Medical Council of New Zealand's members owned a single website.

There are 44 terms listed in Part 1, Schedule 1 of the Medicines Act. Of the websites surveyed, 35/44 (80%) terms were used as shown on Table 1. The three most frequently occurring claims likely in breach of Section 58 of the Medicines Act were (1) treating/preventing mental illness; (2) treating/preventing infertility; and (3) treating/preventing arthritis. Combined, these occurred on 74/101 (73%) of the websites in this study. Furthermore, 34/101 (34%) of the websites had health testimonials, which are prohibited by the Medicines

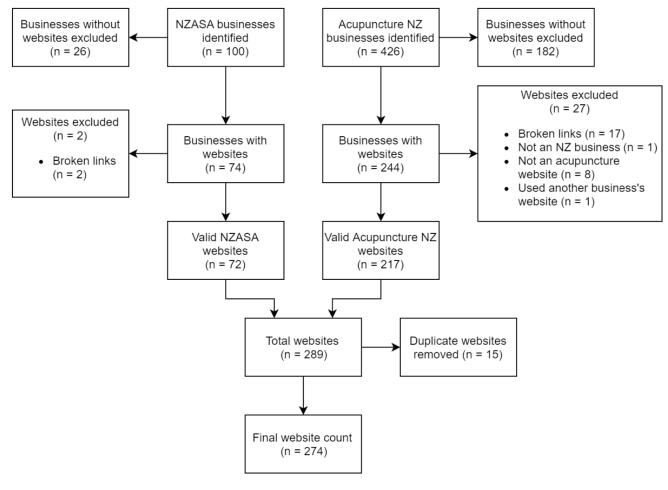
Act, <sup>16</sup> and were likely in breach of Section 58 of the Act.

There are 426 acupuncture businesses which have been listed with Acupuncture NZ by its members, and 217 of those businesses have a New Zealand acupuncture website advertising their services. Similarly, there are 100 acupuncture businesses listed NZASA by their members, and 72 associated business websites. Removing duplicate businesses, this gives a total of 274 acupuncture websites advertising the services of New Zealand acupuncturists as shown on Figure 2.

Six of the nine Acupuncture NZ council members' websites (year 2015/2016) and two of the five NZASA executive board members' websites (year 2015/2016) were likely in breach of the Act.

The data collected for this study is available on request from The Society for Science Based Healthcare.

**Figure 2:** Flow diagram of total estimated New Zealand registered acupuncture websites.





**Table 1:** The list of terms used, along with the number of websites with claims likely in breach of the Act.

Terms	Count	Percent
Mental disorders	97	96.0%
Infertility	85	84.2%
Arthritis	74	73.3%
Blood pressure	69	68.3%
Menstrual flow	55	54.5%
Central nervous system	45	44.6%
Sexual impotence	38	37.6%
Prostate gland	36	35.6%
Menopause	34	33.7%
Ulcers of the gastro- intestinal tract	30	29.7%
Diabetes	23	22.8%
Thrombosis	19	18.8%
Alcoholism	15	14.9%
Heart disease	14	13.9%
Pernicious anaemia	13	12.9%
Dropsy	13	12.9%
Tumours	12	11.9%
Cancer	11	10.9%
Baldness	9	8.9%
Gallstones	9	8.9%
Pleurisy	7	6.9%
Venereal diseases	6	5.9%
Epilepsy	6	5.9%
Poliomyelitis	5	5.0%
Bladder stones	5	5.0%
Kidney stones	4	4.0%
Arteriosclerosis	4	4.0%
Cataract	4	4.0%
Goitre	2	2.0%
Glaucoma	1	1.0%
Leukemia	1	1.0%
Nephritis	1	1.0%
Appendicitis	1	1.0%
Pneumonia	1	1.0%
Gangrene	1	1.0%

Unique terms: 35, Total terms: 576, Median terms: 7, Standard Deviation: 3.99



Of the businesses with websites that were surveyed, at least 39% of the sites belonging to NZASA-registered acupuncturists and 33% of websites of Acupuncture NZ-registered acupuncturists appeared to be in breach of the Act. This is a lower boundary, and is likely to be somewhat lower than the real total, as the search for websites making claims was not exhaustive. In addition, some of the sites that were checked may have produced false negatives due to misspellings of the medical conditions that were being searched for.

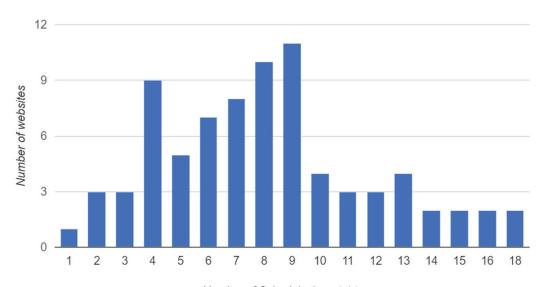
Acupuncturists who are eligible for ACC payments accounted for 97/101 (96%) of the total, as their practitioners were registered with a professional organisation which is recognised by ACC. ACC has rules regarding its ability to limit funding of providers under the Accident Compensation Regulations 2003. In funding any provider, these regulations require that ACC recognises any acupuncturist as long as they are a member of either Acupuncture NZ or NZASA, and have a current Annual Practising Certificate (APC). The expectation is that those professional bodies are responsible—through their registration and APC renewal processes—for providing ACC with an assurance that their members are safe and fit to practise. Where there are concerns about a practitioner, ACC can investigate and put in place certain conditions around invoicing, but they are ultimately reliant on these professional associations to suspend or remove APCs when it comes to formally ending any funding relationship (K Eland, personal communication, May, 2016).

ACC has conducted two reviews of acupuncture since 2011, finding limited or little evidence of effectiveness that it can help with mental health issues, and either inconclusive or insufficient evidence of benefit for musculoskeletal pain other than some positive evidence for chronic neck and shoulder pain. 18,19

The evidence presented in this report shows that New Zealand acupuncturists routinely claim much wider benefits for their practices than is justified by the evidence, or allowed by law. Acupuncture NZ and the NZASA appear to be failing to protect New Zealanders from potentially harmful misinformation.



**Figure 3:** Number of websites that are likely in breach of the Act plotted against the number of Schedule 1 conditions mentioned.



Number of Schedule 1, part 1 terms

In the interests of public safety, these New Zealand professional bodies must take steps to ensure their members are abiding by the rules they agreed to follow when they joined. Both Acupuncture NZ and the NZASA should give clear direction to acupuncturists to remove any terms used in their advertising that breach Section 58(1)(a) of the Medicines Act, as well as claims to help any health condition where rigorous evidence of the efficacy of acupuncture treatment is lacking. Sanctions or suspension of membership would be an appropriate measure to take, until such

time as the owners of these websites ensure any therapeutic claims being made on their website are compliant with all the relevant rules and regulations of New Zealand. The least compliant acupuncturists may warrant referral to Medsafe or the Commerce Commission for prosecution.

## Further study

It is hoped that new technologies such as Machine Learning may be employed in a future study to automate the process of finding websites that are in breach of the Medicines Act, not only for acupuncture but also for other types of alternative medicine.

#### **Competing interests:**

Nil.

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