PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Selling Falsehoods? A Cross-Sectional Study of Canadian Naturopathy, Homeopathy, Chiropractic and Acupuncture Clinic Website Claims Relating to Allergy and Asthma
AUTHORS	Murdoch, Blake; Carr, Stuart; Caulfield, Timothy

VERSION 1 - REVIEW

REVIEWER	Felicity Bishop University of Southampton UK
REVIEW RETURNED	24-Sep-2016

GENERAL COMMENTS	This manuscript reports an interesting and novel study with important implications for patient safety and the regulation of CAM in Canada. Major Issues 1. A discussion of the methodological strengths and limitations of the study is needed. This might include, for example, the exclusion of materials from Quebec City on the basis of language. 2. Qualitative evidence (i.e. verbatim quotes from the analysed texts) should be added to the Results to support the analytic claims made and render the qualitative analysis process more transparent. 3. Paragraph 1 of the Discussion conflates evidence of lack of efficacy (i.e. meta-analyses that conclude intervention X is ineffective) with lack of evidence of efficacy (i.e. meta-analyses that conclude there is insufficient evidence to judge the effectiveness of intervention X). These are very different things that should not be conflated. In places the authors cite older inconclusive reviews; it would be helpful to also acknowledge more recent major studies. 4. The Discussion makes the important point that risks may be especially serious for growing children but the results section does not describe the extent to which the websites purported to offer interventions for adults vs children. 5. In the final paragraph of the methods it is claimed that 'coding required little subjective interpretation'. I would argue that a distinction between points (3) and (4) in the preceding paragraph (claims to treat vs claims about efficacy) does involve a degree of judgement on the part of the coder and the definitions provided in the text are somewhat fuzzy and could be better specified. 6. Table 5/associated paragraph should provide examples of the disclaimers from the websites. 7. The final paragraph of the discussion generalises to 'CAM practitioners' rather than reflecting the diversity that was actually reported in the results section. For example, the final phrase would be more appropriately word "that will curb the questionable claims made by some CAM practitioners". 8. The final paragraph of the discussion mentions the different

	regulatory status of various CAM professions across Canada. This is important and would make an arguably more interesting comparison in the results section (i.e. do self-regulated vs non self-regulated groups make different claims) than comparing the different cities. Minor Issues 1. For interest and to provide international comparison, the authors might like to review the UK Advertising Standard's Authority regulations and the associated guidance provided to UK-based CAM practitioners by the Committee of Advertising Practice. 2. Table 3 should be presented as a single table, not split across 2 tables. 3. There is unnecessary duplication across tabular and graphical presentation of the data in the results section.

REVIEWER	Luceta McRoy USA
REVIEW RETURNED	27-Sep-2016

GENERAL COMMENTS	This is a very important study and adds significant contribution to the field. The paper is well written. Some revisions are needed regarding the following: 1. Are the methods described sufficiently to allow the study to be repeated? The authors discusses how the data was collected, but did not include how it was analyzed. What software program was utilized? etc. 2. If statistics are used are they appropriate and described fully? This was not clearly stated in the article. 3. Are they (results) presented clearly? In table 5, it would be helpful to clarify the test and treatment was suggested for asthma, allergy or sensitivity. For example, was the vitamin and mineral injection used to test/treat asthma, allergy or sensitivity? 4. Are the study limitations discussed adequately? Some limitations appear before the introduction section, but not in the discussion section. An additional limitation include the number of people who actually view these ads and/are visit the clinics as a result of viewing these advertisements could not be measured. Additionally, do the website claims or ads suggest the age group of individuals treated? What percentage are children vs. adults?

VERSION 1 – AUTHOR RESPONSE

Reviewer 1

This manuscript reports an interesting and novel study with important implications for patient safety and the regulation of CAM in Canada.
• Thank you for your thoughtful review of this manuscript.

Major Issues
1. A discussion of the methodological strengths and limitations of the study is needed. This might include, for example, the exclusion of materials from Quebec City on the basis of language.

• The manuscript has been restructured to include a paragraph in the Discussion section that speaks to methodological considerations. It is highlighted in red.
2. Qualitative evidence (i.e. verbatim quotes from the analyzed texts) should be added to the Results to support the analytic claims made and render the qualitative analysis process more transparent.
• A paragraph stating verbatim qualitative examples has been added to the Results section, and is highlighted in red.
3. Paragraph 1 of the Discussion conflates evidence of lack of efficacy (i.e. meta-analyses that conclude intervention X is ineffective) with lack of evidence of efficacy (i.e. meta-analyses that conclude there is insufficient evidence to judge the effectiveness of intervention X). These are very different things that should not be conflated. In places the authors cite older inconclusive reviews; it would be helpful to also acknowledge more recent major studies.
• The Discussion section has been clarified to ensure the absence of conflation. Phrasing consistently refers to lack of evidence of efficacy, rather than lack of efficacy. For some of the interventions discussed, more recent methodologically sound research is not available. However, two additional references to recent reviews and research (highlighted in red in the revised manuscript) have been added to bolster the arguments made in this section.
4. The Discussion makes the important point that risks may be especially serious for growing children but the results section does not describe the extent to which the websites purported to offer interventions for adults vs children.
• This is an important point that may warrant further investigation in a future endeavour. While such an assessment was beyond the scope of this study, at face value, we perceived that the relevant website content rarely revealed clear demographic targets, usually maintaining generic language. For example: “Common Conditions Treated: Allergies” (naturalmedicine.mb.ca).
5. In the final paragraph of the methods it is claimed that 'coding required little subjective interpretation'. I would argue that a distinction between points (3) and (4) in the preceding paragraph (claims to treat vs claims about efficacy) does involve a degree of judgement on the part of the coder and the definitions provided in the text are somewhat fuzzy and could be better specified.
• We have changed the wording of the sentence from “little subjective interpretation” to “limited subjective interpretation”. In our view this is accurate, but we agree that it is important to clearly distinguish (3) and (4). In order to clarify the distinction between claims to treat and claims of efficacy, we have included more examples and explanations in the second last paragraph of the Methods section. Number (3) is simply a claim to treat, and does not require any explicit statement that the treatment works. Likewise, number (4) is simply a claim of efficacy, and does not require any explicit statement that the treatment works. We also clarify that sometimes a single sentence would satisfy both criteria, and provide an example of this.
6. Table 5/associated paragraph should provide examples of the disclaimers from the websites.
• An example of a disclaimer has been inserted into the associated paragraph.
7. The final paragraph of the discussion generalises to 'CAM practitioners' rather than reflecting the diversity that was actually reported in the results section. For example, the final phrase would be more appropriately word "that will curb the questionable claims made by some CAM practitioners".
• We have modified the wording in the final paragraph to improve its neutrality and remove generalization.
8. The final paragraph of the discussion mentions the different regulatory status of various CAM professions across Canada. This is important and would make an arguably more interesting comparison in the results section (i.e. do self-regulated vs non self-regulated groups make different claims) than comparing the different cities.
• Thank you. Such a comparison could prove to be an interesting future study that would potentially test the efficacy of self-regulation in addressing advertising, but it is beyond the purview of this study. This is something that our research team is interested in exploring further.

Minor Issues
1. For interest and to provide international comparison, the authors might like to review the UK

Advertising Standard's Authority regulations and the associated guidance provided to UK-based CAM practitioners by the Committee of Advertising Practice.
• Thank you. These regulations are interesting and relevant. Perhaps an international comparison of various guidelines of this nature would be a useful follow-up to this manuscript.
2. Table 3 should be presented as a single table, not split across 2 tables.
• We are glad to restructure the Table in any way the editors deem appropriate. The data was originally divided into two levels because its horizontal width would have been excessive. The table has been left in two layers but has been combined into a single unit.
3. There is unnecessary duplication across tabular and graphical presentation of the data in the results section.
• We are glad to omit any tables or graphs that the editors deem duplicative.

Reviewer 2

This is a very important study and adds significant contribution to the field. The paper is well written. Some revisions are needed regarding the following:
• Thank you for your thoughtful review of this manuscript.

1. Are the methods described sufficiently to allow the study to be repeated? The authors discusses how the data was collected, but did not include how it was analyzed. What software program was utilized? Etc.
• We have added further description to the Methods: “The data was collected in Microsoft Excel; no complex statistical analysis was undertaken, and analysis was limited to conversion to various percentages.”
2. If statistics are used are they appropriate and described fully? This was not clearly stated in the article.
• Please see the previous response. No complex statistical analysis was undertaken.
3. Are they (results) presented clearly? In table 5, it would be helpful to clarify the test and treatment was suggested for asthma, allergy or sensitivity. For example, was the vitamin and mineral injection used to test/treat asthma, allergy or sensitivity?
• We have modified the table, clarifying the condition(s) to which each proposed test or intervention was seen to relate.
4. Are the study limitations discussed adequately? Some limitations appear before the introduction section, but not in the discussion section. An additional limitation include the number of people who actually view these ads and/are visit the clinics as a result of viewing these advertisements could not be measured. Additionally, do the website claims or ads suggest the age group of individuals treated? What percentage are children vs. adults?
• The manuscript has been restructured to include a paragraph in the Discussion section that speaks to methodological considerations. We have added the limitations you mention, among others.

VERSION 2 – REVIEW

REVIEWER	Felicity Bishop University of Southampton, UK
REVIEW RETURNED	20-Oct-2016

GENERAL COMMENTS	The authors have responded to my previous review and I am happy to recommend the paper for publication.