Title: Patients' expectations of private osteopathic care in the UK: a national survey of patients

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Author's response to reviews: see over
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The Editor
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Dear Sir/Madam

Patients’ expectations of private osteopathic care in the UK: a national survey of patients

Please find our revised version of this paper for your consideration for publication in BMC CAM. We have tried to respond as fully as possible to the comments from the reviewers and the Editor, as outlined below.

Yours sincerely,

Dr Janine Leach

On behalf of the authors
**Responses to Reviewers comments**

**Editorial comments:**

Please include a copy of your questionnaire as an additional file with your revised manuscript. **DONE**

We note that your study was funded by the General Osteopathic council. Please review our advice on competing interests (below) and consider whether this information should be added to the competing interests section of your manuscript.

Please include a 'Competing interests' section between the Conclusions and Authors' contributions. If there are none to declare, please write 'The authors declare that they have no competing interests'.

**New section**

**Competing Interests**: The funder of the study was the General Osteopathic Council whose remit as regulator of the profession is to safeguard the interests of patients; their interest was to assure that the study was conducted well and provided accurate information for patients. Three of the authors (Leach, Fawkes, Fiske) were osteopaths in private practice.

The questions that are asked of authors are:

Financial competing interests:
- In the past five years have you received reimbursements, fees, funding, or salary from an organization that may in any way gain or lose financially from the publication of this manuscript, either now or in the future? Is such an organization financing this manuscript (including the article-processing charge)? If so, please specify. **NO**
- Do you hold any stocks or shares in an organization that may in any way gain or lose financially from the publication of this manuscript, either now or in the future? If so, please specify. **NO**
- Do you hold or are you currently applying for any patents relating to the content of the manuscript? Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript? If so, please specify. **NO**
- Do you have any other financial competing interests? If so, please specify.

Non-financial competing interests: are there any non-financial competing interests (political, personal, religious, academic, ideological, intellectual, commercial or any other) to declare in relation to this manuscript? If so, please specify. **SEE ADDED SECTION ABOVE**

**Reviewer 1 report:**

This is a novel and large survey of patients' expectations of osteopathic care in the UK, using a bespoke questionnaire developed using qualitative methods. The findings are new and I expect of interest to osteopaths but also to the wider CAM and musculoskeletal health communities.
Major Compulsory Revisions

1. I would like to see some additional conceptual/methodological consideration of the nature of expectations and the timing of their measurement. In the introduction, expectations are described as 'epiphenomenal' but this could be interpreted as suggesting they are therefore not a meaningful subject for study and are unlikely to predict or causally determine important outcomes of care. If expectations are highly influenced by therapeutic interactions etc., then wouldn't it be advisable to measure them before treatment begins, as well as or instead of retrospectively?

TEXT ADDED TO THE DISCUSSION OF LIMITATIONS OF THE STUDY
Expectations are not static, they evolve during the course of treatment [50, 51] hence the timing of measurements may be important. In this study, post-treatment expectations were collected and appeared to differ surprisingly little between new and returning patients. It would be useful to compare these data with pre-treatment expectations and also to compare expectations in patients with chronic and acute symptoms.

2. I am uncomfortable with terming expectations 'important' on the basis that they are endorsed by 75% of the respondents. I would prefer to see a term used that more accurately reflects the basis of this classification in frequency data (e.g. "prevalent" expectations). Changed throughout paper from important to prevalent

3. Please comment on the representativeness of your sample of the 32.4% of participating osteopaths compared to the original random sample of 800, if possible including a formal comparison of osteopath responders/nonresponders.

NEW TABLE 1 ADDED WITH CHARACTERISTICS OF RESPONDENTS AND MORE DETAILS GIVEN IN THE RESULTS
The characteristics of respondents are shown in Table 1 and are compared to a previous survey [3]. The latter differed in collecting new episodes only, in all age groups, hence the higher proportion of new patients and lower mean age 44.8 (SD +/- 19.1) years compared to 54.0 years (SD +/- 14.9) in this study. The proportion of patients who were new to osteopathy at 17.8% was similar to that in a survey by the General Osteopathic Council in 2001 [49] which reported 17% new patients. However both prior surveys found 40% or more male patients, suggesting that our sample was skewed towards female respondents. Otherwise the characteristics were consistent with prior surveys, with the great majority of patients being white British, and either employed or retired.

Minor Essential Revisions

4. The description of the questionnaire in the methods section is lacking in detail, e.g. how many items, how long did it take to complete, were there separate ratings of strength of each expectation vs whether or not it was met? Some of these details can be uncovered elsewhere but should be clearly stated in the methods.

PDF OF QUESTIONNAIRE NOW INCLUDED AS APPENDIX 1, TEXT ADDED TO METHODS SECTION
Fifty-one aspects of expectation were included in the final questionnaire, which took about 15 minutes to complete (see Appendix 1).

NEW TEXT IN ANALYSIS SECTION OF METHODS
Two statistics were constructed for each aspect of expectation: (1) the prevalence of positive expectation and (2) the prevalence of unmet positive expectation. Positive expectation was defined as agreement with the statement, and was used as it was intuitively understandable
and gave almost identical rankings to the statistically preferable median score. Unmet expectation was a more complex statistic based on the participant’s paired responses from sections D and E of the questionnaire about their expectation and whether or not it they perceived it to have happened.

5. What was the range and average number of respondents recruited from the participating osteopaths? Please add this to Results.

ADDED: The number of patient responses per osteopath ranged from 1 to 14 with a mean of 6.3.

6. The Conclusions section of the abstract is a little long and the penultimate two sentences should be deleted as they go beyond the data/interpretation presented in this paper. DONE

Discretionary Revisions

7. Suggest changing the subheading "Intervention" to one more suited to this type of research design, e.g. "Procedure". DONE

8. Please add sub-headings for the first two paragraphs of the results. Consider moving the results of the pilot study into the Methods section to clarify the description of the questionnaire instrument. DONE

9. Clarify in the text whether the questionnaires were returned via osteopaths or directly to the researchers. DONE

Reviewer 2 report:

Major Compulsory Revisions

1. Did the sampling process yield a representative sample of patients? This concerns the two-stage selection of osteopaths and their patients, as well as the stratified sampling mentioned at the top of page 9 to ensure contributions from various regions. A more detailed description of all the sampling processes, including the total and stratified numbers and percentages would be helpful.

IDEALLY, this can be summarized and presented in a “CONSORT-like diagram.”

INCLUDED AS NEW FIGURE 1

NEW TEXT IN METHODS re random sampling of osteopaths:
Randomness of sampling from the lists was achieved using integers from a random number generator (www.random.org).

NEW TEXT IN DISCUSSION
The representativeness of the sample was supported by data from similar previous studies, although participation was slightly skewed by country and gender. Communications from 31 osteopaths who refused to participate, included several lengthy letters suggested reasons for non-participation included a lack of research awareness and concerns about the value of this research and research in general, however, this observation is not generalisable

Additionally, it would be helpful to have a corresponding table describing the relevant characteristics of the 1649 patients, perhaps stratified according to
new/established patients and/or region, and with national referent data. INCLUDED AS NEW TABLE 1

Further, with regard to sampling, it would be helpful to have a better explanation of the systematic sampling mentioned on page 9.

EDITED TEXT

The protocol aimed for a systematic sample of patients: that is, all consecutive, eligible patients attending on given days were invited.

2. Page 12: near bottom, reports an overall 15% patient response rate (1701/11,200), but that 32% of osteopaths were represented among responders. Was there any way to determine if the remaining 68% of osteopaths actually distributed their forms? OUR ETHICS COMMITTEE CONSIDERED THAT NON-RESPONDING OSTEOPATHS SHOULD NOT BE CONTACTED

Also, is it necessary to statistically adjust for clustering effects within the practices that were represented in the analyses? This is not to require that such adjustment be made, but a statement about statistical clustering might be helpful.

TEXT ADDED TO DISCUSSION OF LIMITATIONS OF STUDY

The analysis treated all responses as independent data points, but since there were varying numbers from different practices it is possible that the results were skewed by a clustering effect. We did not adjust for this because of the wide range of responses from different practices.

3. Page 17, near bottom, reports 50% response rate among patients. As page 12 reports that 11,200 questionnaires were distributed, this would require 5,600 returned surveys. However, only 1701 completed surveys are reported. Please explain. NEW TEXT

The response rate among patients was higher at around 48% (based on the assumption that only 32% of osteopaths invited patients to participate, so at most 3600 questionnaires were distributed) providing less opportunity for bias.

Minor Essential Revisions

4. Page 7: six lines from bottom, should be “was.” DONE

5. Page 9: indicates that a “Recruitment form” was used to assess protocol deviations; however, no relevant results were presented. ADDED TO FIRST SECTION OF RESULTS

No evidence was found of selection bias in recruitment by osteopaths, using the information on the Recruitment forms returned by 151(58%) of participating osteopaths.

6. Page 10: line 1, it is unclear if the 3% margin of error is for the total of 1,500 patients or for 500 new patients. If the latter, my understanding is that the margin of error would be 4%. ADDED

7. Page 10: “Intervention” section, I recommend that the text state that Participant Information Sheets were designed for adults with the various reading ages to avoid confusion regarding the age categories of participants. DONE

8. Page 10: near bottom, states that the accuracy of data entry was measured in a 10% sample of questionnaires. However, no results are presented nor statements made for the rate of data entry errors (only percentages of missing
data were reported). ADDED

9. Page 17, near bottom, states that new patient responses were close to those of all respondents. Does this statement refer to closeness of response rates or the actual responses to questionnaire items? In either case, please explain why similarity of new and established patients adds validity to overall results. THIS SENTENCE DELETED

10. Page 17, further on, states respondents were typical of private osteopath patients nationally, with reference #3. As indicated in major compulsory revisions above, it would be useful to present these data in a table. DATA NOW INCLUDED IN FIGURE 1 AND TABLE 1

Discretionary Revisions

11. Page 12: line 1, it would be interesting to know if any very serious misconduct was suspected (and reported) and what effect this reporting requirement may have had on osteopath participation. ADDED

12. Page 13: “Respondent profile” section reports that 70% of patients were women. Given this skewness, were any subgroup analyses performed to identify significant differences in expectations between men and women? NOT PERFORMED

13. Page 17: last paragraph, I would classify this as “selection bias.” AMENDED

14. Table 3 (including statements in text): if I understand this item correctly, it appears counterintuitive that patients would report it as an unmet expectation if did not have to forgo some luxuries in order to have osteopathic treatment. Additional clarification/discussion might be helpful. THIS ITEM HAS BEEN EXCLUDED FROM THE MAIN RESULTS AND PRESENTED SEPARATELY

15. Figure 1 is interesting; however, in its present form is essentially a 2x2 table. Is there any way to identify the expectations corresponding to each of the 51 data points? That would make the figure much more informative (some of the data points in the upper left quadrant may have to be lumped together because of the similarity of results and technical limitations in resolution). FIGURE 1 HAS BEEN DELETED AND A 3X3 TABLE PRESENTED INSTEAD, THANK YOU FOR A HELPFUL SUGGESTION