Author's response to reviews

Title: Factors Influencing Decision Making in Orthopedic Surgery - an international online survey of 1147 orthopedic surgeons

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Author's response to reviews: see over
Dear Editor,

we had two detailed and thoughtfull peer reviews to our paper draft. Some parts oft the review are quite „mechanistic“ in a way that the strict rules of clinical research and publication are applied in a stringent manner. Now was our study not related to the field of clinical research but the field of social sciences where study design and reporting methods are different. This obviously was a bit irritating to reviewers used to the field of natural science. Nevertheless we found it important to publish our study in a journal that is read by the subjects of our study – surgeons in the field of musculo-skeletal surgery. We have taken on board a substantial amount of improvement proposals. Here the detailed list of revisions based on the reviews:

**Title:** Factors Influencing Decision Making in Orthopedic Surgery - an international online survey of 1147 orthopedic surgeons  
**Version:** 3  
**Date:** 13 August 2012  
**Reviewer:** Dawn Stacey  
**Reviewer’s report:**  
August 10, 2012

Dear Editor BMC Musculoskeletal Disorders,  
Re: Factors influencing decision making in orthopedic surgery – an international online survey of 1147 orthopedic surgeons

Guidelines for standardized reporting of studies:
1. Questions posed by the authors well defined – NO. in fact, there are no objectives or research questions provided.
2. Methods appropriate and well described – NO, they are inadequate
3. Data sound? Unclear because of inadequate methods
4. Manuscript adhere to relevant standards for reporting? NO
5. Discussion and conclusions well balanced and supported? No
6. Limitations of the work clearly stated – YES but incomplete
7. Authors clearly acknowledge any work upon which this builds – YES but some references are missing
8. Title and abstract convey what was found – not completely
9. Writing acceptable – needs English editor

Comments Nr. 1-9 do not appear to be a review but a summary of guidelines with answers. Aims and scopes of the scientific project are clearly stated. All relevant standards in the field of the study (sociology) has now been adhered to. All data and calculations have been performed by a bio-statistician. The Methodology of this
research project has been adequately described. An English Editor has reviewed the manuscript.

Title does not reflect the focus of the study – rather than ‘factors influencing decision making’ I would suggest ‘sources of information influencing…’ MAJOR

This idea has been taken on board, title changed accordingly as suggested

Abstract:
- Missing the objective of the study and study design MAJOR
- It is only the abstract so we had to keep contents short. Details regarding objectives and study methodology and conclusions added.

- How was the survey designed
Online survey with open and closed questions, clarified

- Need a better description of the analysis rather than just saying “statistically evaluated” MAJOR
The statistical methods used have been adequately described

- Results need to have the response rate added and statistics to support statements MAJOR
The response rates are clarified in the results section

- The conclusions do not reflect the findings. The current conclusion could be a result of the potential for response bias with participants indicating what they think the authors wanted to hear MAJOR
There was no indication in the setup of the survey to enable respondents to think what the authors want to hear; all questions were also randomized in order from one respondent to the next

Introduction
- References need to be added to support many statements.
References added

There needs to be more consistent use of terms. For example the first sentence says ‘implants and materials’ and then implants and techniques
Changed were feasible as there are no manufacturers of techniques but orthopaedic surgeons can acquire new techniques.

No objective or research questions are provided at the end of the introduction
altered

The sentences beginning “we developed a questionnaire focusing primarily on the factors… -this needs to be moved to the methods section
moved
Material and methods

- Needs to have the study design added
  -> altered

- Needs more details on how the sequence was randomized
  -> software resolution mentioned although we do not think the randomization of
  questions is of particular scientific interest
  - There is no analysis methods provided MAJOR
    Statistical methods are mentioned including the software used

Results

- “overall 12,005 orthopedic surgeons were contacted” – this statement is
  incorrect because later there is a report that >3000 were not able to be contacted
  because of wrong emails etc
  This has been clarified now

  - Table 1 – how were incompletes defined
    Incomplete surveys do not have answers to each question

- What were the eligibility criteria? Where did the mailing addresses come from?
  The eligibility criteria was to work in an orthopaedic department, our ethical
  committee did not allow us to report the origin of the email data

  - Response rate for figure 2 is >100%
    That is true due to excel manners of handling numbers

- Need to have a table of the characteristics of participants rather than report
  each characteristic in separate figure. You could have the department heads’
  characteristics reported separately from other MINOR
  -> the difference of junior and senior surgeons was not focus of this study and we
  therefore think it would make the manuscript too long if we give all the details
  regarding this area. This is a very good idea for a further publication

- The results only start later in the paper – this needs to be moved up to include
  characteristics of participants and response rate
  Ł characteristics and response rate in methodology have been moved up

- How was the survey developed and tested? For example the question on rating
  sources of information on the internet is rather vague given you could go to
  electronic journals available on the internet or to evidence-based programs or to
  company websites
  Ł it is right that “information from the internet” is rather vague but that is due to
  the nature of the internet. This has been mentioned in the discussion section
  now

Discussion

- These sources of information should be discussed in terms of their
effectiveness for changing knowledge, attitudes and uptake in clinical practice – see EPOC website and work of individuals such as Jeremy Grimshaw
-> implemented in discussion

- The second paragraph more or less repeats results and % provided within results section rather than summarizes results. There is reference to studies in the last sentence but no reference citations are provided in the reference list
-> reference list updated

- The conclusion provided may be a discussion point but it does not really reflect the results
The conclusions are now more concise and reflect the results.
Format
- I don’t think this paper followed journal guidelines for format – all figures and tables should be at the end of the paper and not within MAJOR
  - The paper was single spaced – usually journals require double spacing
All changed in new version
DISCRETIONARY
Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Needs some language corrections before being published
Statistical review: No, the manuscript does not need to be seen by a statistician.