Reviewer's report

Title: Exploring laypeople's epistemic beliefs about medicine - a factor-analytic survey study

Version: 1 Date: 21 March 2012

Reviewer: Sivia Barnoy

Reviewer's report:

Exploring laypeople's epistemic beliefs about medicine –
a factor analysis survey study

This is a very interesting research study and I appreciate the opportunity to have been able to review it. However amendments are required before publication.

1. Is the question posed by the authors well defined? yes
2. Are the methods appropriate and well described? See list below
3. Are the data sound? Some problems with sample selection – see detailed remarks below.
4. Does the manuscript adhere to the relevant standards for reporting and data deposition? See remarks below.
5. Are the discussion and conclusions well balanced and adequately supported by the data? Yes,
6. Are limitations of the work clearly stated? No
7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished? yes
8. Do the title and abstract accurately convey what has been found? yes
9. Is the writing acceptable? yes

Major revisions:

- Although mentioned in the discussion, the Public Understanding of Science theory can help support your argument in the introduction.

I have some concerns regarding the sample:
- According to average age of participants (20.79±3.83) the sample consisted mainly of young participants, this fact might influence the results, as younger people tend to use the Internet more.
- The same goes for the fact that 50% of the participants were students; this might bias the results regarding epistemic beliefs and understanding of medical information and Internet use.

These two issues should be addressed.
Procedure:
- Please refer to ethical considerations: IRB approval, informed consent.
- What was the compliance rate?

Results:
- The conventional test for factor analysis is "varimax rotation" explain the considerations for the statistical test chosen.
- The a cronbach of the factors are fairly low (<.70), I would not described them as acceptable when building a new scale.

Minor revisions:
Table:
- Title should include the statistical test used and an explanation of the numbers presented.
- Some items are with meaning, hence they are negative, to ease on the reader, it would be better to reverse score these items so all will be in the same direction (i.e. positive).

Level of interest: An article whose findings are important to those with closely related research interests.

Quality of written English: Acceptable.

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.