Reviewer's report

Title: Non-verbal communication of compassion: measuring psychophysiologic effects

Version: 1 Date: 18 October 2011

Reviewer: Susan G Gaylord

Reviewer's report:

Overall:
This is an intriguing and innovative pilot study of the feasibility, including feasibility of blinding of study patients to the purpose of the intervention, of evaluating the psychophysiologic impact of a two forms of non-verbal communication of compassion in the setting of a health professional-patient interaction. The project is thoughtfully designed, the results interesting, and the discussion does a good job, overall, of articulating the study limitations and future directions. There are some minor suggestions for improvement, as follows:

Abstract:
Line 3 – remove the word “determine”
Under methods, describe in more detail the assessment of blinding.
Make sure all abbreviations are spelled out in the abstract (e.g. RR).
In the conclusion, it is stated that there are two different blinding strategies. Please describe the two strategies – are they the same as LKM1 and LKM2?

Background:
- Second sentence is unclear. “Although most research has focused on outcomes of verbal communication, experts estimate most communication is non-verbal.” Suggest that the last half of the sentence be changed to “...there is little research on nonverbal communication, which experts estimate is the predominate form of communication.”

- Typos that need to be changed include benefit to benefits, mechanism to mechanisms, adding an “of” to “Better understanding psychophysiologic...”, 2nd paragraph removing “but we”, 3rd paragraph, first sentence, matching subject and object, and other such minor typos, throughout.

- Please give research references for other studies of non-verbal and verbal communication. (para. 1)

- Please give research references for studies showing that LKM has distinct physicologic effects on the practitioner. (para. 4).

- In last paragraph of background, please reiterate that the intent of this study is
to assess feasibility and that there is no formal hypothesis in this study to assess outcomes.

Methods:
- Please mention IRB information at the beginning of methods section.
- Please mention that the volunteers recruited were all women – was that the intention? If so, what is the rationale?
- Please describe what is meant by “healthy”? How was that assessed? Describe the demographic questions and assessment instruments in more detail.
- Describe the components of the study prior to mentioning the “40 minute study” for clarify for the reader.
- Describe the training of the practitioner of LKM. Was the practitioner male or female?

Outcomes:
- More details need to be added regarding the blinding-related questions asked of the subject – perhaps a table with these questions could be added. Since these are the questions that assess blinding, which is central to the study, this information is very important.
- Please give some references for prior research on RR and how it is sensitive to affective states and meditation.
- How was practitioner-subject correlation in RR analysed?

Results:
- How was it determined that six subjects would be needed for this feasibility study?
- Please add more detail on the report of blinding outcome. This is actually the crucial outcome of the study and so much more detail would be helpful. Is there any quantitative data? If qualitative, please give more verbal descriptors. Was there a report from the practitioner on their own experience of the study?

Discussion:
More discussion of both patients’ and practitioner’s experience during the intervention would be helpful.

The discussion about mirror neurons is an interesting theory.

It might have been helpful to have an experimenter observe the whole interaction or a have a videotape of the interaction, to note whether there were subtle cues, including changes in facial expressions.

Regarding the comment about temperature increases, it is unclear what is meant
by “the device warming up”.

Conclusion:

It would have strengthened the study if there had been a formal “blinding questionnaire” that measured expectation and reactions to different phases of the study. Also, a videotape of the whole process would perhaps yield useful findings.