Author's response to reviews

Title: Effectiveness of Motivational Interviewing in Primary Care Patients With Dyslipidemia: A Randomized Cluster Trial. Dislip-EM Study

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Author's response to reviews:

Dear:

Regarding the suggested corrections indicated by the referee, we address them point-by-point below:

Title
"Effectiveness of Motivational Interviewing in Primary Care patients with dyslipidemia: A randomized cluster trial. Dislip-EM Study"

Referee 1:
Answer: The Manuscript was revised again and the mistakes have been corrected.

Editor:
(1) Please remove the duplicate Manuscript Title from the top of Page 5 (including the words "Title page").
Answer: Done

(2) Please include sections: List of Abbreviations, Competing Interests, and Authors' Contributions, in that order, after the Conclusions section.
Answer: Done
(3) Please include all Figure titles and legends in a section called "Figure Titles and Legends" in the main text after References. Please upload only the image files (no title or legends) as figures.

Answer: Done

(4) Please include all Tables at the end of the main manuscript (after Figure Titles and Legends, as part of the main .doc file), instead of additional files.

Answer: Done

Referee 1:

4. PB – The statistical methods are now much better described in red at the bottom of page 10 and top of page 11, but there are English writing issues that need to checked. Please have authors review and correct.

Answer: Perhaps you are referring to the paragraph in page 10, where it says “considering as a first level of analysis as a second doctor and patient” should say “considering the doctor as a first level of analysis and the patient as a second level”.

PB – The interpretation of the results as showing that MI was effective in significantly affecting outcomes is controversial because the univariate and multivariate results differ. The univariate results on single clinical measures or CVD risk scores indicate no differences in outcomes by group. Only in the multivariate results does “Group” emerge as an independent predictor and only in models of cholesterol/LDL reduction together. Confidence intervals are very wide and the inclusion of some variables could be questioned or formulated differently, so that it is uncertain whether the effect of Group is robust and generalizable. This could occur for a number of possible reasons – the effect of MI is very small, multiple changes are occurring at the same time (drugs), outcome indicators change very little or are not good indicators of change. The use of total cholesterol/LDL as an outcome measure was somewhat unusual. We would have greater confidence in the results IF the univariate and multivariate results agreed and/or 2 different clinical indicators showed similar results – such as cholesterol AND CVD risk score. The data seem to be sound, but interpretation will differ among scientists. I would argue that MI may have an effect, but corroborating studies are needed.

Answer: This has been corrected in the conclusions in the final text (in red). We found better that way, so we add more appropriate information to our results.

5. Discretionary revision Were certain diet behaviours more likely to change, such as eating more olive oil?

Answer: This issue was not measured in the study. The questionnaire of Mediterranean Diet used does not include the olive oil intake.

6. Discretionary revision Starting medication was a covariate that would affect the clinical measures rather substantially, which was highly significant in the modelling, 19% of control group, 9% of the intervention group started medication. It would have been good to see if any changes differed in the subgroups by
medication use. An overall decline of 7% in both TC and LDL-C was modest, considering the number who went onto medication.

Answer: This is explained on the page 16, paragraph 5: “When the pharmacological prescriptions are isolated,.....”

7. Major revision There is a lot of extraneous information in table.

Answer: The tables and figures are right and they have been added at the end as the editor requires.

Major Compulsory Revisions PB - 1. The abstract currently says that motivational interviewing was show to be significantly effective, which in my view is overstating the results. When the clinical outcomes are considered separately, there was no difference in outcomes by group. ONLY when total cholesterol/LDL-C was considered as a composite outcome AND multivariate modelling was undertaken was there a difference between groups. Generally we want to see strong and consistent associations across different methods of analysis to have confidence in the results. Therefore the results, in my opinion, are promising but need to be confirmed. The wording in the abstract needs to be revised to reflect a more nuanced conclusion.

Answer: This conclusion has been changed in the abstract.