Reviewer's report

Title: DiAlert: a prevention program for overweight first degree relatives of type 2 diabetes patients: Results of a pilot study to test feasibility and acceptability

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Reviewer: Masakazu Nishigaki

Reviewer's report:

This manuscript reports the results of pilot study of DiAlert, randomized controlled trials investigating the effect of preventive intervention for first degree relatives of type 2 diabetes patients, of which protocol had already been published elsewhere.

I fully agree that the DiAlert involves timely, important issues in public health genomics area. However, I wonder this article has outstanding importance itself.

Major Compulsory Revisions

1. Manuscript re-construction; methods, results and discussion section.

Manuscript body other than introduction section was written in complicated manner. The objective of this study is to determine 1) feasibility and 2) possible impact of Intervention in DiAlert study. However, descriptions about each element were scattered and some of them were duplicated. Especially, these drawbacks are frequently found in methods section. For example, "views", "appreciation", and "acceptability" appeared in "indicators of change" section. Another example, descriptions in the first paragraph of methods section appear repeatedly. Author should avoid duplication and reorder the elements of each section in adequate sequence, concordant with objectives of this study. The manuscript will be more comprehensive if authors assemble the descriptions with adequate sub-heading, for example:

1 Feasibility (and validity?) of intervention
1-0 intervention description
1-1 recruitment
1-2 fidelity
1-3 appreciations
1-4 acceptability
2 possible impact of intervention
2-1 cognitive change
2-2 behavioral change

Following those subheading, how and when the researchers assessed the feasibility/impact in corresponding variable. I also recommend authors to draw scheme about data collection schedule. Similarly, Results and Discussion section
should be reconstructed.

2. It is unclear why participants were divided into two groups. Please describe the rationale of this point. If researchers planned to determine adequate group size, participants should be divided into three or more groups in different group size (small, medium, large). However, size of current two group is almost same.

3. The term "group comparison" in data analysis section is misleading. Actual analysis conducted by authors is pre-post comparison in one-sample setting.

4. Initial eligible criteria has been modified due actual result of recruitment. Authors should clarify whether the modification affect the validity of intervention.

5. Sample set in this study includes four normal weight subject. As authors has already mentioned in the manuscript, it is no matter in assessing feasibility of intervention process. However, analysis about impact of intervention would be biased (may be underestimated) by those ineligible subject. It would be valid to exclude them from analysis about intervention impact.

6. It would be more comprehensive if the results relating feasibility are shown in table format.

7. Authors regard the neutral score of 3.0 for manual acceptance as "reasonable". Generally, the neutral response means that about half of participants didn't accept the clarity of manuals. Therefore I think authors should make effort to brush up the manuals. Please show the rationale why authors decided not to modify the manual.

8. In discussion section, authors should emphasize interpretations about feasibility assessment. The most part of the discussion is occupied by the descriptions relating intervention impact. Subsequently, those issues should be discussed in main RCT.

Minor Essential Revisions

1. It is difficult for readers to apprehend how researchers assessed the fidelity. It would be helpful for readers if the checklist is disclosed as table or appendix.

2. Authors mentioned the necessity of strategic recruitment in order to obtain diversified population while recruitment methods in DiAlert main study is almost same as those in this pilot study. This point is not problematic in this study by itself. However, I'm afraid that it would be a drawback in sincerity of study design process, if this manuscript was published as formal pilot study of DiAlert.

Discretionary Revisions

Why don't authors include description about the cultural adaptation for Turkish population in this manuscript?

Masakazu Nishigaki
Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests