Author's response to reviews

Title: Effects of exercise on kidney function among non-diabetic patients with hypertension and renal disease: randomized controlled trial

Authors:

Franklin C Barcellos (franklin.sul@terra.com.br)
Ina S Santos (inasantos@uol.com.br)
Grégore I Mielke (gregore.mielke@yahoo.com.br)
Fabrício B del Vecchio (fabricio_boscolo@uol.com.br)
Pedro C Hallal (prchallal@gmail.com)

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Author's response to reviews:

Reviewer's report
Title: Effects of exercise on kidney function among non-diabetic patients with hypertension and renal disease: randomized controlled trial
Version: 2 Date: 8 April 2012
Reviewer: Malinee Laopaiboon

Reviewer's report:

There are still some unclear points to be considered as followings:

1) The sample size of this paper should be estimated for detecting at least 10% difference of the glomerular filtration rates between intervention and control groups at the end of 16 weeks. However, it is unclear what is the figure in control group as a baseline information.

The estimated glomerular filtration rate was 48.47±9.61 ml/min. x 1.73 m2. This is now stated at the Methods section of the manuscript.

2) 'The sample size is increased from the calculated number, 63, to be 75 for compensation of loss follow up.' These figures present about 20% expected loss follow up. The authors should provide explanation for this expectation.

This expectation is based on previous clinical trials conducted with chronic kidney disease patients. This is now stated.

3) It is unclear whether the treatment allocation list is concealed.

Yes, the allocation list will be concealed and this is now stated.

4) It is unclear who will assess all outcomes, especially the primary outcomes, whether they will be blinded the treatment.

The main outcome variable (glomerular filtration rate) is estimated through blood test, and therefore, blinding of the person reading the results is obvious.
will not be available at blood collection). The same is valid for all other biochemical variables. In order to evaluate quality of life, trained interviewers will administer the questionnaire. These interviewers will be blinded for the status of control or intervention of each patient.

5) We usually use our eyes to justify whether baseline characteristics are balance between treatment and control groups. We do not use any statistical test for this situation because the sample size of any trial is estimated for testing effect of intervention. Therefore I do not agree with the analysis for double check whether the two group baselines are comparable.

We agree with the reviewer, and have deleted the mention to statistical tests at that stage. Imbalances between the groups will be examined using our ‘eyes’, as suggested.

6) The authors should specify which outcomes will be analysed by t test and chi square test.

T-test will be used for all continuous outcomes, which include glomerular filtration rate, quality of life and physical fitness. We will only use chi-square test in the unlikely situation of analyzing dichotomous variables, such as fit vs. unfit in a given test. This is now stated.

7) It would be better information to use confidence interval for estimating treatment effects.

We agree and we will use confidence intervals for estimating treatment effects. This is now stated.

Level of interest: An article of importance in its field
Quality of written English: Acceptable
Statistical review: Yes, and I have assessed the statistics in my report.
Declaration of competing interests: I declare that I have no competing interests.