Reviewer’s report

Title: Living-donor transplantation leads to a major improvement in physical functioning: an observational study on the impact on potential donors and their recipients

Version: 0 Date: 19 Dec 2018

Reviewer: Lucky Aziza Bawazier

Reviewer's report:

Reviewer's comments BMC Nephrology (BNEP-D-18-00829)

1. The authors should explain how the number of subjects analyzed in the parameters such as number of steps/day, TEE, and AEE was decreased to 15 and 14 from 21 and 22, as this could give a reduction of statistical value.

2. It is interesting if the authors add the data of blood pressure of both groups before and after the surgery procedure.

3. Physical performance is the main outcome of this study. However, physical performance could be also affected by mental health component (bio-psycho-social concept). Why did not the authors include the mental component in the analysis?

4. Based on this study, there was a significant reduction of eGFR in the donor group. Did the authors confirm the existence of CKD in the donor group with USG examination (structural damage criteria)? Because the clinicians have the responsibility to explain to donors about what consequences they will have with reduced eGFR.

5. Did the author examine other laboratory parameters given the mean post-transplant eGFR declined to <60?

6. Please provide the timeframe of study (date, month, years) in the method section.

7. In method section, body composition measurement was taken in fasting state except in diabetic patient, please provide the literatures of how it affects the measurement.

8. In statistical analysis especially the multivariable regression analysis, why did the author only adjust for sex and bodyweight? Does age also affect handgrip strength?

9. How did the author choose which variables included in regression analysis? Please provide the details in methods.

10. In demographic table (table 1), please also provide the proportion of female subjects included.
in this study.

Please confirm that you have included your review in the ‘Comments to Author’ box?
As a minimum standard, please include a few sentences that outline what you think are the authors’ hypothesis/objectives, their main results, and the conclusions drawn. Your report should constructively instruct authors on how they can strengthen their paper to the point where it may be acceptable for publication, or provide detailed reasons as to why the manuscript does not fulfill our criteria for consideration. Please supply appropriate evidence using examples from the manuscript to substantiate your comments. Please break your comments into two bulleted or numbered sections: major and minor comments.

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Are the methods appropriate and well described to allow independent reproduction of experiments?
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Yes

Does the work include the necessary controls?
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NA

Are you able to assess the statistics?
- Are the statistical test(s) used in this study appropriate and well described?

- Is the exact sample size (n) reported for each experimental group/condition (as a number, not a range)?

- Are the description of any error bars and probability values appropriate?

- Are all error bars defined in the corresponding figure legends?

- Has a sample size calculation been included, or a description and rationale about how sample sizes were chosen?
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