Author’s response to reviews

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

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Author’s response to reviews:

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Prof. Mitra Mahdavi-Mazdeh
Editor - Renal Transplantation
BMC Nephrology

Subject: second revision (BNEP-D-18-00829R1)

Maastricht, 12-02-2019

Dear dr. editor, Dear reviewers,

We would like to thank you for reading and reviewing the manuscript. Thank you for allowing us to submit the revised version of the manuscript. We answered the questions reviewer number 4 raised in the attachment. Please find enclosed the revised version of our manuscript entitled ‘Living-donor
transplantation leads to a major improvement in physical functioning: the impact on potential donors and their recipients¹.

The enclosed manuscript describes original work. The results presented in this paper have not been published previously in whole or in part, except in abstract form.

Thank you for considering our manuscript, and we look forward to receive your decision.

Sincerely,

Natascha J.H. Broers, PhD. - on behalf of all co-authors.
Department of Internal Medicine, Division of Nephrology

Attachments:
- Revised manuscript v2
- (Revised) Figures 1-5

Contributions: research idea and study design: MHLC, JPK, NJHB; data acquisition: NJHB, TYF; data analysis/interpretation: MHLC, JPK, NJHB; statistical analysis: NJHB; manuscript: NJHB; manuscript review: MHLC, JPK, TYF; supervision or mentorship: MHLC, JPK.

Comments:
Reviewer #4: Reviewer's comments BMC Nephrology (BNEP-D-18-00829R1)

We would like to thank the reviewer for reading and reviewing our work. Please find the answers to your questions/comments below.

In body composition measurements section is reported that not all patients were in fasting state e.g. diabetics. Don't you think that you should have not included recipients with diabetes? You don't have donors with diabetes (not suitable).

As many patients with kidney disease have diabetes we believe that is representative for the population to also include patients with diabetes. In addition, not including patients with diabetes would therefor lead to possible selection bias.

What is the cardiovascular disease present in the 4 donors?
Cardiovascular disease (CVD) diagnoses in kidney transplant donors included infrarenal aortic abdominal aneurysm (n = 1), and transient ischemic attack (n = 2). 1 donor was misclassified for CVD (inferior infarction on ECG, but not on echocardiography). We now presented this at the patient characteristics in Table 1.


Don't you think that blood pressure and BMI of donors is too high?
Do you think that these characteristics of the donors are relevant for the following analysis?


Based on these guidelines all donors included in the study were suitable for living kidney donation (also with regard to BMI and blood pressure), and therefore representative for the population that was studied. Given the random sampling of the donors included we do not believe it has not led to drawing incorrect conclusions.

Line 287 Immunoglobulin A as primary disease you should write IgA Nephropathy
We now changed this in the manuscript.

Do you have any comment on the reduction of renal function in donors? GFR seems to me quite low

The guidelines for potential donors demands a minimum (age-dependent) eGFR to proceed with living donation to ensure that the remaining eGFR after donation is sufficient. This minimum eGFR is the same as in ‘The United Kingdom Guidelines for Living Donor Kidney Transplantation. Jan 2018’ of the British Transplantation Society and the Renal Association (see link) https://bts.org.uk/wp-content/uploads/2018/01/BTS_LDKT_UK_Guidelines_2018.pdf.

After kidney donation, the remaining eGFR is approximately 72% of the predonation eGFR due to functional adaptation of the remaining kidney [1]. This is also seen in our manuscript, and thus in line with the expected eGFR after donation.

According to the Dutch guidelines, donors will have lifelong yearly follow-up of renal function (eGFR and urine analysis) and blood pressure.

Line 305 in addition, not;  
We now changed this in the manuscript.

Sentence starting at line 369 is not clear  
We now revised this sentence in the manuscript.

In discussion you don't need to repeat so many data of results but just to comment on them. You can probably shortened it.

We kindly thank the reviewer for this suggestion, as the editor whishes we can shorten the discussion section. However, we believe that data presented/described in the discussion section adds value for the reader.

What is on the y axis in future 4?  
We now provided the label on the y-axis of figure 4. The SF-36 nor-based scale scores are presented on a scale from 0-100 with 0 representing the "worst possible health" score to 100 representing the "best possible health" score.