Author’s response to reviews

Title: Contribution of chronic diseases to educational disparity in disability in France: results from the cross-sectional "Disability-Health" survey

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Author’s response to reviews:

Reviewer #1:

Very nicely written article. Short and concise.
Thank you.

Reviewer #2:

1. This is a well-designed study and addresses an important question.

2. The methods, data and results are interesting.

3. Discussion of results and the following conclusions are appropriate.

4. I have a couple questions for the authors.

   a. Is it possible to see if there is a correlation between education and disability from the data available? If so, would it be appropriate to include in study?
Yes, this is possible to estimate the OR of being disabled when having a primary vs a tertiary educational level. This OR is 4.74 (95% CI: 3.99-5.62, p <0.0001) for women and 4.24 (95% CI: 3.51-5.14, p <0.0001) for men. We added this result in the text (see p.12).

b. The authors mention differences in observed prevalence between the education groups on page 12 in percentages. Are those differences significant and can a p-value be assigned to these differences in percentages?

To assess if the differences are significant, the best way may be to look at the confidence intervals, and see if there is an overlapping between the CI of the different educational level groups. We added this information in the text (p. 12-13).

We are sorry, but we do not know how to estimate a p.value in this case, as we calculated age-standardized prevalence and as the results are weighted. Actually, previous papers using the same methods did not present any p.value either.

c. This applies to figure 2 as well. Is it possible to see if the differences in disability prevalence between the groups significant statistically?

It may be possible using bootstrap. But it should take a very long time, as it took 6 months to obtain the confidence intervals for each gender (table 2 and table S2)! Moreover, the R code to get the p.value using bootstrap does not exist yet, and may quite difficult to build.