Reviewer's report

Title: Increasing prevalence of familial recurrence of multiple sclerosis in Iran: A population based study of Tehran registry 1999-2015

Version: 0 Date: 04 Jul 2017

Reviewer: Steve Simpson Jr

Reviewer's report:

I note the authors have endeavoured to action my comments from the original submission, which I appreciate. The article is much improved. I do have some various comments and suggestions as enumerated below. If the authors action these comments, it would be a further improvement.

Comments

- Since the authors state that the prevalence significantly increased during the study period, suggest the authors add the point prevalence of MS in Tehran in 1999.
- The authors' description of age standardisation seems incomplete. Needs to be specified to what population the prevalence estimates are being standardised to.
- The whole of the paragraph running from lines 147-150 in the Results is incorrectly presenting analyses as though the outcome was the proportion of cases, but the table is actually comparing the proportions by sex. Suggest the table be moved.
- Also unclear why the reference age group differs between Table 1 and Table 2.
- The results in Table 2 for age & familial recurrence are not significant and they should be presented accordingly. You can say that the 18-27yo group had near-significantly greater proportions with familial recurrence compared to the 48+ age group, but you can't say it's different. Associated text in the Results and Discussion should be modified accordingly.
- I appreciate the authors effort to make use of my comment from the preceding review, but its present usage seems to miss the point. I propose that the fact you see a difference in familial recurrence by age is not a causal mechanism nor a risk factor but merely reflects a reality of your sample. I suggest you alter how these results are discussed to make better sense of what is happening.
- The sentence running from lines 208-210 does not make sense. Are you proposing that age of onset is a common characteristic between MS and schizophrenia? In any case, given as the preceding paper does not discuss non-MS conditions, I would suggest this topic not be broached in the Discussion without better substantiation.

- Much of the Discussion is almost like bullet points, rather than a coherent whole. Suggest the authors endeavour to restructure the Discussion so that it is more cohesive.

Minor comments

Introduction
- In line 45, I believe the authors mean MS is the second most common cause of disability.
- In line 48, resulted should be resulting.
- Suggest the sentence from line 52-53 should be restructured. Also era probably should be group.
- Line 54, the "rank of" can be removed.
- In line 63, suggest authors replace "find out" with identifying.
- Line 65, suggest the word attached be replaced by associated.
- Line 71, suggest courses be replaced by types. Also the MS can just be written as MS.

Methods
- Line 96, remove the word, criteria, before Poser.
- Suggest line 99 the word cod should be code.
- For line 99, suggest "their drugs" be replaced by treatment.
- Suggest the sentence on line 101-102 should be rephrased.
- For line 109, into should be one word.
- For the sentence on lines 115-117, suggest the authors mean to say that because there is some number of participants who were not registered in their onset yet, the prevalence estimates calculated may be underestimates of the real values.
- For line 120, prevalence is not a rate.
- For line 126, analyses should be analyse.
Results
- For line 134, populations should be persons.
- For line 137, suggest all the text except the Figure citation can be omitted.
- Please restructure the sentence from lines 142-143.
- The sentence running from lines 148-150 should be restructured.
- The sentence running from lines 157-159 should be restructured.
- The sentence on lines 168-169 is unclear and should be restructured.

Discussion
- Suggest the bracketed mean ages of onset in lines 176-178 should add years to each.
- Further to the bracketed ages in lines 176-178, either present all ages with SD or none.
- On line 185-186, please provided the percentages with positive family histories of MS in Iran, Qatar and Azerbaijan.
- On line 188, "Central America such as" can be removed.
- The final sentence on lines 211-12 is unclear and should be restructured.

Formatting/other
- It is unnecessary to add binary before logistic regression. This can be removed from text and tables.
- Various instances where the or of should be modified, as in my annotated copy.
- Be consistent in the terminology. Age-standardised is sometimes used, other times you call it age-adjusted. I suggest the former.
- Where p-values come back as 0.000 in STATA or SPSS or the like, present this result as p<0.001.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.
Unable to assess
Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.
I am able to assess the statistics

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