Reviewer’s report

Title: A Logistic Regression Analysis of Risk Factors in ME/CFS Pathogenesis

Version: 1 Date: 14 Apr 2019

Reviewer: ANTHONY KOMAROFF

Reviewer's report:

The authors have made major improvements in the manuscript. There are three additional changes I would suggest that the authors consider:

In my review of the first version of the manuscript, I noted that: "On page 10, the authors should consider one caveat in reporting the female predominance that they (and most of the literature) have found: the cases were not from a random sample of the community but from patients who had sought medical care. Women are more likely than men to seek medical care for nearly all illnesses that can strike both men and women."

The authors replied: "9. Female predominance: We agree that our data is limited in demonstrating female predominance, due to the non-randomised recruitment procedures; however, considering the NHS primary care services have an almost universal coverage, we consider that the ratios between female to male in the ME/CFS and MS groups recruited, fairly represent the population distribution, which is similar to those reported in the literature."

I think they did not understand my point. As I understand it, they recruited patients from those WHO HAD SOUGHT MEDICAL CARE, not from a random sample of the population at large. There is abundant evidence that women in Western societies tend to seek medical care FOR ALL TYPES OF MEDICAL PROBLEMS more often than men. Thus, this fact alone could explain some of the often reported female predominance among diagnosed patients with ME/CFS. If the authors agree, that point would be worth adding.

On page 10, lines 20-23, I would recommend that the authors insert the phrase, HIGHLIGHTED IN CAPS, to parallel the point that they later make in the Discussion: "Participants with ME/CFS....were more likely to report a family history (BUT NOT PERSONAL HISTORY) of anxiety."

Then, on page 10, lines 23-8, I would recommend that the authors insert the phrase HIGHLIGHTED IN CAPS, since that is what their data shows: "It has been reported that people with ME/CFS often have a higher prevalence of psychiatric comorbidities, primarily depression and anxiety disorder [40], ALTHOUGH WE DID NOT FIND A HIGHER REPORTED PERSONAL HISTORY OF EITHER DEPRESSION OR ANXIETY DISORDER IN PEOPLE WITH ME/CFS."
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.

Yes

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?
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