Reviewer's report

Title: Movements disorders in neuroleptic-naive patients with schizophrenia spectrum disorders in a low income setting

Version: 2
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Reviewer: Michael P Caligiuri

Reviewer's report:

This is a well-written manuscript describing spontaneous movement disorders in an underreported population for whom pharmacotherapeutic management of psychosis is of great societal concern. The study contributes to a growing body of literature on disease-related EPS by demonstrating that the prevalence of parkinsonism and involuntary movements among Ethiopian patients is consistent with reports from other parts of the world. This is important as it supports a universal feature of psychosis that may have genetic rather than environmental bases.

The study design and setting are appropriate for this kind of epidemiologic observational research. However, there are a few concerns that once clarified by the authors should improve readability and scientific aspects of the research.

Major Compulsory Revisions

1. It is stated under Methods/Participants that patients with no previous antipsychotic treatment were enrolled. It would be important to state (if true) that these patients also had no prior exposure to other antidopaminergic medications such as metoclopramide (or other antiemetics), amoxapine, buspirone, etc. that could account for a movement disorder.

2. As described under Assessments, the study used the SAS to assess parkinsonism; however the standard (unmodified) SAS as originally published (and cited in paper) did not include an item to assess bradykinesia. Yet, in the discussion, authors state that rigidity and bradykinesia were common manifestations of parkinsonism in this study. Authors should reconcile this discrepancy.

3. When reporting results, it would be very useful to include a table of mean scores (with range) for the EPS ratings for all subjects and subgroups (based on BMI), gender, or other relevant groupings (e.g. from Table 1).

4. Figure 2 was not provided for consideration.

5. The authors are encouraged to consult a statistician. Given the unequal sample sizes and likely unequal variances using a t-test to compare the age of participants with vs without SMD (results paragraph 2) is likely incorrect.

6. The statement under Exploratory analysis (prior to Discussion) that “...increasing body weight measured with BMI was protective...” is not supported
by the findings. The study was not designed to evaluate protective properties of any patient-related variable. It may be better to simply state that increased body weight (as a proxy measure of dietary health) was associated with lower prevalence of SMD.

Minoir Essential Revisions

1. The first sentence under conclusions states that the study supports the argument that involuntary movements in schizophrenia may be intrinsic to the pathophysiology of the illness. While this is a reasonable conclusion, the study also supports that parkinsonism may also be intrinsic to the dopamine pathophysiology (especially considering that twice as many patients met criteria for parkinsonism than dyskinesia)

2. There is a minor typographical error in the sentence in the 3rd paragraph of the Introduction that reads “…it has been proposed that indiopathic extrapyramidal disturbances…”

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests