Reviewer's report

Title: The impact of medication side effects on adherence among patients with schizophrenia: results of a cross-sectional nationwide survey

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Reviewer: Joanna Bredski

Reviewer's report:

The question posed by the authors is well defined: to assess the relationships between self reported non adherence to antipsychotic medication and 1. side effects and 2. health resource utilisation.

The methods are well described. The authors state that the Morisky scale has four clusters when it appears in fact to have five. The sample used does limit the generalisability of the findings and this was discussed in the limitation section. The recruitment method used selected participants who were motivated, functionally able and who self-reported a diagnosis of schizophrenia, which is unlikely to represent the majority of those with schizophrenia. I’d like to know what the purpose of the original data collection was as this study used data that had already been gathered. I would like to know if the participants were paid or offered other incentives to participate. I would also like to see a discussion of the psychometric properties of the measures used e.g. Morisky Medication Adherence Scale. The statistical methods used were appropriate. I have not seen the original data set.

The discussion section could be improved. Firstly the demographic differences were not discussed e.g. why do the authors think they found that marriage and higher education significantly increased the rates of non-adherence? Also the idea that there is a meaningful difference between so called ‘typical’ and ‘atypical’ antipsychotics is largely being abandoned – the authors may wish to consider their use of these terms in their discussion. The conclusions are logical and supported by the data.

Many limitations are stated, but I would recommend a clear statement that the participants were relatively high functioning, because of the method of recruitment and as shown in the demographic information and that this limits generalisability.

I do not know the purpose of the original data collection to know if the authors were building on any pre-existing work.

The title and abstract accurately convey the findings.

The writing is acceptable although there are a number of punctuation errors and the references are out of sequence in the text and in some cases an incorrect reference number is given in the text.
The findings are not highly novel. In the literature around predictors of medication adherence in schizophrenia many studies have found no significant relationship between medication adherence and side effects. Other studies have found an association between psychological (akin to sedation/cognition cluster on Morisky scale), metabolic and extra-pyramidal side effects and non adherence. The extra-pyramidal symptom of akithisia has been found to determine adherence. Previous studies that have examined this relationship have used diagnostic criteria to confirm the diagnoses of participants, which is a more robust method than self-report.

1. Minor essential revisions: organising references correctly, correcting number of clusters on Morisky scale in discussion, ensuring correct punctuation throughout, describing psychometric properties of measures used.

2. Major compulsory revisions: include adequate discussion of recruitment of participants including purpose of initial research and any incentives for participation. Clarify limitations section as described above. Amend discussion to include consensus view that there is no meaningful difference between so called ‘typical’ and ‘atypical’ antipsychotics. Add to discussions section as described above.

**Level of interest:** An article of limited interest

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.