Reviewer's report

Title: Assessing the Construct Validity and Reliability of the Parental Perceptions on Antibiotics (PAPA) Scales

Version: 1 Date: 24 September 2013

Reviewer: Monika Bullinger

Reviewer's report:

Major Compulsory Revisions

1. You state: "Most infections of the upper respiratory tract are viral in nature and neither require, or are effectively treated by, antibiotics[14]. The use of antibiotics to treat viral URTIs is considered an overuse/misuse of antibiotics [4, 15- 18]." To me this is an example of misuse rather than overuse- please provide a clearer definition of overuse and misuse.

2. Please state the object of PAPA measurement: is it parental perception or is it psychosocial factors affecting use? Please also specify the differences between the terms perception, beliefs, attitudes, behavior and clarify which of these the PAPA instrument addresses.

3. Please explain the recruitment of the sample - is it representative?

4. An information about the PAPA instrument development would be helpful, the mere reference to a published paper is not enough.

5. Given the sample size it would have been possible to use cross-validation techniques, why was this not done?

6. The socioeconomic and clinical information is referred to as criteria which are measured by the instrument. However these appear to be descriptors which are not part of the construct measured - please explain.

7. Reliability information is lacking and needs to be provided.

8. How did you handle missing data?

9. Please provide legends for the tables and explain abbreviations.

10. There are two Figures which seem identical - and lack specific information (e.g. strength of association as expressed by adequate coefficients)

11. Are there any data about the actual use of antibiotics and the PAPA scale scores?

12. In parts there seems to be inconsistency in the use of the English language, please check again.
**Level of interest:** An article whose findings are important to those with closely related research interests

**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.