Reviewer's report

Title: Hypomania spectrum disorder in adolescence: A 15-year follow-up of non-mood morbidity in adulthood

Version: 1 Date: 9 November 2013

Reviewer: Sarah Doucette

Reviewer's report:

The authors present a study examining the association between hypomania spectrum disorder in adolescence and mood and non-mood morbidity 15 years later in a community sample from Sweden. As the findings regarding early activation and long term outcomes in the general population are unclear, this study is warranted. The study design is strong with an impressive 15 years of follow-up; however, several aspects of the methodology could be clarified to help the reader interpret the findings. In addition, the authors need to be careful in over interpreting findings based on only a few cell counts. These issues are discussed below.

Major Compulsory Revisions:

1) The authors present a review of some clinical and high-risk studies (particularly in the US), and some studies of BD in community samples. The authors need to present a more comprehensive review of the literature as the findings from these studies should help inform the current manuscript. A systematic approach should be taken when synthesizing the literature. The authors heavily cite findings from an American clinical study but fail to address and compare findings from other international studies whose findings are in fact contradictory. Namely, bipolar disorder is not seen in children from some other high-risk and clinical samples, also the findings regarding neuro-developmental disorder and behavioral disorders vary. These studies vary by methodologies and study population which may help to explain the differences in rates of comorbid psychopathology. Eating disorders are also not common comorbid disorders in all BD samples. Again the characteristics of the sample likely influence the findings. The authors should comment on the different methodologies and sample characteristics, or at least summarize how these variables might influence the rates of comorbid psychopathology in individuals with BD.

2) The authors do not discuss rates of health service utilization across populations in the introduction. The authors either need to omit this objective or clarify their rational for including this. What does this component of the study add to the main objective as per the title?

3) Do the authors have any information on socio-economic status, or education and occupation of the study subjects? These types of demographic variables are
major potential confounders, if you do not have these data, you should mention in your limitations how this might affect or bias your findings. This information might help inform the findings, for example the surprisingly low rates of substance use disorders found.

4) The composition of the study groups is unclear. Did any of the subjects meet criteria for both MDD and a history of hypomania? This needs to be clarified. It appears that there is disconnect between the study population and the target population. The authors are trying to target adolescents with hypomanic spectrum disorders, but as noted in the limitations, the sample was originally screened for depression. The authors need to elaborate on the potential selection bias introduced here in their limitations. If adolescents were screened for hypomania instead, how might the study findings change?

5) The author state that bulimia nervosa was more prevalent in the hypomania group compared to the MDD group, however, this is only based on 1 individual in the hypomania group and 3 in the bulimia group. These findings are irrelevant and are based on way too few fell counts to draw an interpretation. The authors need to state that the prevalence of this disorder was too low to comment on any differences.

6) The authors also need to be careful with what is significant and what is not significant as the results and discussion sections are misleading. Indicate which findings are significant and not-significant. The authors should also not present findings in the abstract if they are not key findings (i.e., significant).

Minor Essential Revisions:

1) Please include where the sample is from in the abstract.

2) Please omit the sentence regarding bulimia nervosa, and PTSD in the results section of the abstract. These findings are irrelevant as they were based on too few cell counts or were non-significant.

3) Avoid using words such as “somewhat” when describing the magnitude of risk. An increase in risk is small, large, significant or non-significant. Also stay away from phrases such as “there was a tendency”, when describing associations, this is non-scientific.

4) Please report how many subjects from the sample were high school dropouts, was it a large proportion? If so you need to discuss how this may influence your findings with respect to selection bias in your limitations.

5) Please indicate who performed the baseline interviews, were they psychiatrists? Was inter-rater reliability established?

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable
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.