Reviewer's report

Title: Mental Health in Adolescents with Type 1 diabetes: Results From a Large Population-Based Study

Version: 1 Date: 7 September 2014

Reviewer: Elizabeth Beverly

Reviewer's report:

Major Compulsory Revisions:

1. The authors need to include psychometric data (i.e., validity, reliability, sensitivity, specificity) for each of the measures. This information is needed to demonstrate the surveys are valid and reliable. Further, the authors used several short form versions of the surveys, and sensitivity and specificity data are needed to confirm that these surveys are appropriate.

2. The authors need to include the name of the survey for obsessive compulsive behaviours along with psychometric data. Additional details about the survey, such as what type of scale (e.g., Likert scale) was used and what the five questions assessed, are needed.

3. The authors need to address other limitations to the study, including the small sample size of adolescents with type 1 diabetes, the limited age range (16-19 years of age) for participation, the lack of diabetes technology data, and the lack of race/ethnicity data. These limitations may limit the generalizability of the data.

Minor Essential Revisions:

1. All sections need to be revised to address spelling and grammatical errors.

2. In the Introduction section, the authors focus on advancements in diabetes technology and the potential impact of technology on psychological functioning. The sentence, “While new technologies are likely to improve glycemic control...there is still a lack of studies examining the potential positive effect of these advances on other outcomes, such as psychological functioning.” This sentence implies that the current study explored the impact of technology on psychological functioning, which is misleading. This point may be best in the Discussion section and not in the Introduction.

3. In the Results section under the subheading “Type 1 diabetes and sleep problems,” the authors should describe the results of the specific sleep parameters that were measured. Sleep problems were one of the key variables assessed in the manuscript and one sentence is not sufficient to describe the findings.

4. In the Results section under the subheading “Type 1 diabetes and subjective health complaints,” the authors should list the specific somatic complaints.
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.