Reviewer’s report

Title: The Association of Depression and Anxiety with Glycemic Control among Mexican Americans with Diabetes Living Near the U.S.-Mexico Border

Version: 2 Date: 4 July 2013

Reviewer: Francesco Rotella

Reviewer’s report:

The authors performed a cross-sectional study to investigate the associations of depression and anxiety with the behavioral management of diabetes and glycemic control among Mexican American adults living near the border. The topic is of interest and the sample size is adequate.

Major Compulsory Revisions

The reliability of the method used for determination of A1c (GLYCO-Tek) should be reported providing some data on comparisons with the methods currently recommended by IFCC.

A major remark on this study concerns the statistical analyses performed by authors. In Methods section is stated that authors performed a series of linear regression models correcting for several covariates. How did the authors know that the effect is linear? Data with quartiles should be provided and, if the case, patients should be categorized on the basis of CESD.

In the results section R2, Adjusted R2 and significance levels of each model is not reported.

In Table 3 and 4 only unstandardized coefficients [B] and no Standard Error have been reported. Furthermore, these Tables are definitely not clear. For example: In Table 3 (reporting the associations between depression and indicators of glycemic control), how an association expressed with a B of -5.292 (p<.01) between birth country and waist circumference, should be interpreted?

In addition, the last three paragraphs of the results section are not clearly explained. What kind of analyses did authors perform to obtain results on moderation/interaction? Why authors chose to make sub-analyses dividing patients in two groups using the median of the variables taken into consideration?

Finally, a p#.10 it is not usually worth to be considered an “approached significance”.

Minor Essential Revisions

Background (2nd par): Several longitudinal studies have been performed to investigate the bidirectional association between diabetes and depression, and
some meta-analyses, combining these studies, have been recently published. This point should be expanded, discussing the fact that diabetes may cause depression, thus influencing the rates of depression in diabetic subjects found in cross-sectional studies.

Materials and Methods (4th par): Physical Activity was assessed using two different instruments. This should be reported in the discussion section as it could be a limitation of the study. In addition, authors should confirm the results obtained on physical activity performing a multivariate model including the questionnaire used for the assessment.

Table 2: Numbers of different groups should be added in each column.

Results (2nd par): Physical activity appears to be negatively associated with depression.

Discussion (2nd par): This paragraph, as an overall, appears to be redundant as it almost repeats what already reported in the results section.

**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