Reviewer’s report

Title: GLYCAEMIC CONTROL IN TYPE 1 DIABETES MELLITUS AMONG CHILDREN AND ADOLESCENTS IN A RESOURCE LIMITED SETTING IN DAR ES SALAAM - TANZANIA

Version: 0 Date: 24 Mar 2016

Reviewer: Jean Joel R Bigna

Reviewer's report:

Noorani and colleagues conducted an important study in children and adolescents with type 1 diabetes in a resource limited setting. This study is generally well presented but requires major revisions for improvement.

General comments

1. All references in text should be done with square brackets: "[   ]" as per journal reference format.

2. The authors in the manuscript have well defined cutoff for normal HbA1c according to age in children and adolescents. It would have been interesting that the authors research the factors associated with glycemic control using univariable and multivariable binary logistic regression, using cut-offs they have defined for the dependent variable.

Specific comments

3. Title page. The first author should give only one e-mail address.

4. Abstract. Method. "Glycemic control was assessed by measuring glycosylated hemoglobin". Authors should precise that this 'A1C' glycosylated hemoglobin.

5. Abstract. Method. Authors should precise in Methods that they have used linear regression model to analyze factor associated with glycemic control.
6. Introduction. Page 4. Line 7 -17. The data reported here are very old. The authors must have given data older than 10 years so that readers have a better contextual overview of the burden of type 1 diabetes.

7. Introduction. Page 4. Line 46-49. Please, fully describe the population in which this study has been conducted.

8. Results. Authors must choose one format with which they report the results. Either a decimal or two decimal places, not both.

9. Table 3. Authors should define DM and BGM in footnotes of the table.

10. Table 3. There are two "Adherence to BGM regimen (poor/good)".

11. Add axes' name for figure 1.

12. Results. Line 42-52. This should be stated in Methods section.

13. The first paragraph of the Discussion section should state results related to objectives.

14. Discussion. Page 16. Line 46-53. Authors should explain in more detail, the reasons for poor glycemic control in adolescents. Authors should name the hormones they are talking about and give the physiological and pathophysiological mechanism.

Also, what is the pathophysiological mechanism of social and psychological stress which generates the low-glycemic control in adolescents?

Replace "pubertal hormones" by "sexual hormones". Written like this, it seems that there are specific hormones for puberty.
15. Discussion. Page 17. Line 32-37. The authors should why in this study duration of DM was not an independent factor of glycemic control i.e. what is the difference with others reports.

16. Discussion. Page 17. Line 40-47. "This is currently…insulin infusion (CSII)”. Please add the reference.

17. Discussion Page 17. Line 50-52. I think that the authors should not explain the absence of difference with "It could be explained by the poor adherence in our diabetic population.” Which adherence authors are talking about? Adherence to blood glucose monitoring? Adherence to insulin regimen?

18. This study have cross sectional design. This is not the best method to demonstrate relationship between two variables. Authors should it as limitation.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics
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Needs some language corrections before being published

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