Reviewer’s report

Title: Shine & Lal index as a predictor for early detection of β-thalassemia carriers in a limited resource area in Bandung, Indonesia

Version: 1 Date: 14 May 2019

Reviewer: Maria de Fatima Sonati

Reviewer's report:

The manuscript is better now, but still needs corrections. Firstly, a review of English.

In the first lines of the Abstract and Introduction, the thalassemia concept must be adequate: globins do not mutate, globin-genes mutate.

What is the value of MCH used for cutting, 26 pg, as stated in the Abstract, or 27 pg, as stated in the Methods?

Hb E is a variant, but Hbs A, A2 and F are normal hemoglobins, can not be so termed. They are fractions of a normal hemolysate. Please correct, in Abstract, in the Methods and where else is so referred to.

In the Abstract (Results, line 14) it would be more appropriate to say Hb E only, not 'high Hb E level'; in line 15, replace 'genetic test' by molecular analyzes or DNA sequencing or beta-globin gene sequencing. At line 16, the number and percentage of samples with Hb A2 above 4% should be informed.

At the end of the Introduction (page 2, line 7), 'Since more than 200 different THALASSEMIC mutations' have been ...

In Methods, 'Ethical Approval' must come before, or immediately after or in 'Participants'.

Detection of mutation in the beta-globin GENES rather than Beta-globin mutation detection (Methods).

In the penultimate paragraph of the Discussion, it would be important to justify the statement included and explain the laboratory consequences of co-existence of alpha and beta thalassemias.

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

Yes
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

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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