Reviewer's report

Title: VITAMIN D STATUS IN HEALTHY BLACK AFRICAN KENYAN ADULTS AT A TERTIARY HOSPITAL IN NAIROBI, KENYA: A CROSS SECTIONAL STUDY

Version: 0 Date: 03 Aug 2018

Reviewer: Zaki Hassan-Smith

Reviewer's report:

1. It is useful to have data on vitamin D deficiency and related biochemical parameters reported in different settings and cohorts and this is the central contribution of the study. The information on the vitamin D threshold at which PTH increases is one factor that should be taken into account in defining 'deficiency' or 'insufficiency', however there are other factors such as thresholds at which there are adverse health outcomes (be they skeletal or non-skeletal). In addition from Figure 2, showing the scatter plot of vitamin D vs PTH, it could be argued that 20 ng/ml would be a better cut-off. The sample size is modest - and the authors note study power as a limitation.

2. Opening statement on vitamin D being known about for centuries needs to be amended - my understanding was that it was identified in the 20th century.

3. The passage from line 32 should be re-considered as largely observational studies merely implicate vitamin D in these non-skeletal diseases: 'Vitamin D is a prohormone, which is widely known for its role in bone health. (1) Observational studies in the last decade have demonstrated its role in reducing the risk of non-communicable diseases such as cancers, autoimmune diseases, cardiovascular diseases, disorders of glucose metabolism, neurodegenerative diseases and communicable diseases (2)(3)(4)'

4. The authors also raise the issue of whether measuring active forms of vitamin D would be of benefit - it would be interesting to have some discussion of this in light of recent literature.
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?
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Yes

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I am able to assess the statistics

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