Author’s response to reviews

Title: C - reactive protein and interleukin - 6 levels among human immunodeficiency virus -infected patients with dysglycemia in Tanzania

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Criticism 1:
Methods: Were participants taking anti-diabetic or anti-hypertensive agents included in this study?
Response 1: Majority of our participants were un-aware of their glycemic and blood pressure levels, so they were not on medication.

Criticism 2:
Methods: Diagnosis with dysglycemia: Was there the presence of IFG+IGT in this study?
Response 2: Yes. Dysglycemia comprised of Impaired fasting glucose (IFG) – 48(20%), impaired glucose tolerance (IGT) – 26(11%) and diabetes 2(1%). This is shown on table 2.

Criticism 3:

Methods: Diagnosis with dysglycemia: "diabetes mellitus (DM), defined as a fasting blood glucose of ≥7.0mol/L and a glucose level ≥11.1mol/l 2 hours after a 75g oral glucose load" In this case, which is true, "and" or "or"?

Response 3: It is Diabetes mellitus (DM) is defined as a fasting blood glucose of ≥7.0mol/L OR a glucose level ≥11.1mol/l 2 hours after a 75g oral glucose load. This is also corrected on the document. Methods, Sub-section:Determination of dysglycemia, line 5, Pg 5.

Criticism 4:

Discussion: "According to Lufti et al, immune inflammatory response may be the result of a change in metabolism by initiating insulin resistance in order to reduce energy consumption for body activities other than host defence." How about insulin resistance in these participants? Did authors check their serum insulin levels?

Response 4: We did not measure insulin resistance in the patients. We only assessed their glucose levels.

Criticism 5:

Discussion: "because the male gender is associated with excessive IL-6 expression (p-value 0.008) [39]." Please show the data of IL-6 levels separated by gender.

Response 5: After running analysis for IL6 with gender, the ‘male sex argument’ was removed because; A total of 17 people had high levels of interlukin 6; 4 were male and 13 were female. Therefore sex may not explain the low IL6 levels in this population. Other studies have urged that IL6 has a much lower half life in circulation compared to CRP which is a down-stream inflammatory biomarker, this argument may be most applicable to our study. This paragraph is corrected accordingly. Discussion, line 52-58, Pg 10.