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Journal Name:	International Journal of TROPICAL DISEASE & Health
Manuscript Number:	Ms_IJTDH_34919
Title of the Manuscript:	CORRELATION OF MICROALBUMIN WITH BIOCHEMICAL AND ANTHROPOMETRIC PARAMETERS IN SICKLE CELL ANAEMIA PATIENTS IN southern NIGERIA
Type of the Article	Original Research Article

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This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments	A more robust analysis of the data would be helpful. I have a few concerns and suggestions concerning the methodology and presentation: In the Patients and methods section - PCV not included or measurement referenced - Nephropathy definition needed (ACR > 3.5) with reference. - Important to separate micro- from macro albuminuria, since a few patients with very high macroalbuminuria can skew the mean ACR data significantly. If outcome data is not normally distributed this affects the statistical test needed in the analysis - Is data collection a first am sample? First am urine samples are the best sample to correlate with 24 hr urine albumin excretion. If it is a later sample there is a poorer association with 24 hr albumin. Data analysis - Please clarify if all regression analysis is univariate or if any are multivariate analysis done. - Please state the type of correlation tests done (Spearman, Pearson, etc...,) - Please clarify if ANOVA tests were only used for 2 or more groups of continuous variables. - How were the control and subject number chosen? Was a power analysis done to show this would provide adequate sample size for an	PCV included and referenced. Nephropathy defined and referenced. Random spot urine samples were used in this study. The data has been reclassified using ACR cut-off of 3.0. Linear regression analysis was only done for PCV. All correlation tests done were Pearson's.



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	expected difference in ACR between groups? If this was done please include a description in the methods. If not done please explain how the control and SCA samples sizes were selected. Results - BMI is stated to be higher in SCA patients in the text, but table 1 shows a lower BMI in SCA subjects? - Table 2 is confusing because it is unclear what comparisons are being made in the "P-value" column. Are these ANOVA analysis of all 3 variables (control, nephropathy, no nephropathy) or is this a comparison between Control group and Total nephropathy group. If this is Control vs "Total" SCA then ANOVA is not the appropriate test, a test comparing means between independent variables (Student T-test if data is normally distributed) would be used, but only ANOVA and correlation is mentioned in the methods section. - If outcome data is not normally distributed, non-parametric tests would be indicated. - I would suggest table 2 be split into 2 tables. One comparing Control to Total SCA subjects and one comparing 3 groups; Control, SCA with nephropathy, and SCA without nephropathy. - Line 91-98 and Table 3 and 4: These appear to all discuss univariate analysis only. If so, there is a risk of bias from confounding or collinear variables. I would <u>strongly</u> suggest adding a multivariate analysis, such as Linear Regression, to determine which variables are independently correlated with ACR.	Table 2 has been split in two (tables 2 and 3) Table 2 is a comparison of controls vs total SCA patients using an independent t-test. Table 3 has three groups compared with one way analysis of variance (control vs nephropathy and normal ACR SCA patients).
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	- Figure 1; Bars are not labeled. Dark bars are labeled "Study" which is unclear. Light bars are not labeled at all. The text suggests these are Control and SCA subjects, but which is which? Figure 2 is not needed since results are non significant. Discussion - I would suggest discussing in more depth how this study is different from or adds to the work of Bolarinwa and others in the study so fickle cell nephropathy in Nigeria How can you explain the much larger percentage of subjects with SCA nephropathy compared to prior studies?	Bars have been labelled. There was a significant negative correlation between PCV and ACR hence figure 2 is retained. More elaboration done in discussion.
Minor REVISION comments	In the Abstract - Some acronyms are not defined or in key words (SCA, PCV, etc) - The term "analbunimuria" is an older term and can be confusing. "Non-albuminuria" or "normal ACR" might be clearer. - There is a need to define all groups and factors described in the abstract's results - It is convention to minimize or avoid the mention of non-significant results in abstract unless there is some compelling reason to do so. Plasma urea and creatinine are discussed in result, but not mentioned as outcomes.under study - Nephropathy mentioned in last line but not define (ACR > 3.5?) See attached abstract of Bolarinwa as an example	Corrections effected.
Optional/General comments		