Letter to the Editor

Correspondence: Iron deficiency anaemia among apparently healthy pre-school children in Lagos, Nigeria.

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Dear Editor,

We read with great interest, the original article by Akodu OS, et al[1] in the recent issue of your journal. At first, we would like to commend the authors for their endeavour but at the same time feel that few clarifications are required and also would like to make the following comments which would benefit the general readers of this journal:

1. The sample size was calculated based on estimated prevalence of iron deficiency anaemia (IDA) of 69%. But the prevalence of IDA revealed by the present study is much lower (10.11%). Therefore, to achieve the same power (90%) and precision (standard deviation 1.96 in a two-tailed test) the sample size required will be 4308.

2. Iron supplementation is not mentioned as an exclusion criterion. So, if children on iron supplementation were also included in the study, whether that lead to such a low prevalence of IDA in the studied population.

3. The methodology mentions that collected blood "was transferred into plain tubes". While sample in plain tubes is appropriate for serum based studies such as ferritin but for estimation of Hemoglobin and Mean Corpuscular Volume (MCV) EDTA (Ethylenediaminetetraacetic acid) sample is required.

4. The authors mention that "the samples were protected from light at all times using sheets of black plastic" but the reason for this is not clear.

5. The mean age of the children is stated to be 30.25 (±15.77) months. Therefore, the mean ± 2 SD (standard deviation) for age becomes -1.29 to 61.79 months, but age cannot be a negative value! Similar type of data is also found in Table 2 (serum iron, ferritin, transferring saturation). The reason seems to be that the aforementioned data doesn't have normal distribution (with presence of outliers) in the given population. In such a case it would have been better if authors presented these data in median ± IQR (interquartile range) format.

6. Methodology does not mention collection of data regarding family size, birth order or maternal age. They are also not mentioned in the demographic characteristics presented in Table 1 but are being used in Table 3.

7. In view of significantly higher prevalence of IDA in ≤ 2 years age group compared to older children, data regarding breast feeding would have been invaluable in this age group[2].

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References

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