

Review of: "Nutritional Status and Dietary Patterns of Children Aged Ten Years and Below In the Buea Municipality, South West Region Cameroon"

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Potential competing interests: No potential competing interests to declare.

The tone of this manuscript is sincere and the subject matter is of humanitarian importance; for these reasons I recommend acceptance following an effort to edit and upgrade the presentation. Data collection and interpretation were simplistic, sometimes suggesting cause and effect when a correlation or untested association was detected. Some basic morphometric measurements and a "semi-structured, self-administered questionnaire" were used to assess children's health status; the questionnaire was not included or explained further, so doubts linger about its validity.

By simplistic, I mean that the authors generally categorized graded parameters such as nutritional quality, drinking water, vaccination, etc. as either good or poor. Poor or inadequate water – do those infer contaminated water, inadequate supply, or both? Poor sanitation and Typhoid are attributed to water supply problems, so presumably the presence of *Salmonella* and other pathogens is a factor. I am not convinced that the main impact of a disease like Typhoid Fever on small children could be a nutritional deficiency as suggested.

A few statements of the extremely obvious were made, for instance:

(p. 3, with 2 citations) "...infant and young children's feeding practice directly influences their nutritional status".

(later in the same page with a different citation) "food intake directly influences an individual's nutritional status."

The data as presented caused some confusion. P 13 states that frequencies of "stunting, wasting, underweight, overweight and obese were 38.7%, 9.6%, 23.6%, 35.4% and 66.5%". That suggests that the total percentage of overweight and obese children was 35.4 + 66.5%, or 101.9%. The total of stunted + wasted + underweight children adds up to 71.9%, although only 22.6% had poor dietary diversity (page 9). These appear to be overlapping categories and some clarification and sorting of data might help make this understandable. Heavy frequencies of overnutrition like these suggest that factors other than "limited access to adequate food supply" (p.3) are of importance, but this is not clear and was not explained.

A total of 13 references were made to vaccine non-compliance as a contributing factor to malnutrition, with no mention of what specific vaccines were under consideration. There was speculation without evidence that immune insufficiency caused by a failure to vaccinate led to infection, compromising nutritional status (p. 14). Were a high percentage of underweight, stunted and wasted children infected or is this just speculation? It is equally or maybe more plausible that



parents who get their kids vaccinated may also be inclined to feed them more carefully; this is an example of the causeand-effect issue mentioned in paragraph 1.

There are grammatical and punctuation errors in need of correction here and there. For example "data" is the plural of datum, and used incorrectly as a singular noun on pages 1, 2, and 5. The correct form (data... were) appears on p. 4. Also two of the axis labels for Figure 1 seem nonsensical to me ("potatoescocoy" and "Milk/milk"). Also there is a strange reference on page 11 to "children of age 61-12 months".

The discussion of education is another source of confusion. Certainly maternal nutritional knowledge can contribute favorably to children's health, but a study concluding the opposite was mentioned. Two incompatible conclusions of Ulkuwani and Suchindran {m/29//} were that there were "negative effects of low maternal education on child nutritional status" and that children of mothers "with high education were more likely to be stunted". I seriously doubt the second conclusion and did not understand the attempt to attribute this discrepancy to the presence of adult schools in one location. Please clarify, and avoid references like "{m/29//}", which give the manuscript an unfinished, rough-drafted look.