

## 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.

## **General comments**

The study titled "Nutritional Status and Dietary Patterns of Children Aged Ten Years and Below In the Buea Municipality, South West Region Cameroon" provides information on nutritional status and dietary diversity in locality of Cameroon. The study provides the good information in the introduction section and tried to present the results obtained enough to make the reader to understand the study. Despite these, the study has a number of concerns which need the attention of the authors. Generally, the grammar need an extensive work to enable the manuscript to address the intended message and this should be done in all sections especially in discussion, conclusion and recommendations. Materials and Methods section is missing a very important information including the description of the study areas including the names of the areas studied. The study design is not well described including the information on how randomization and snow ball was conducted. The results are not well presented including not showing all variables included in the final model which makes results interpretation difficult. I believe the authors generated enough and useful information but failed to present them in more professional way. The discussion section did not concentrate in discussing the results generated and why such results were obtained in this study, instead the authors ended in comparing the results with other previously conducted studies. The conclusion and recommendation were fairly drawn from the results obtained but need extensive grammar work. The comments of the specific areas are provided in the table below.

## Specific area comments

Area	Comments
Abstract	
"were housewives or privately employed had children were more likely to be stunted"	were housewives or privately employed had children more likely to be stunted"
"mother/caregivers residing in a rural area (AOR=0.348, P=0.013)."	Hanging segment of the sentence, re-write
Conclusion	Re-write the last sentence
Introduction	
"protein energy malnutrition"	What does this mean?
Studies have associated the distribution of protein energy malnutrition and micronutrient deficiencies among the	What were the findings at least in summary



population with socio-economic, education, sanitation, environment, season and climatic conditions	The transfer of the transfer o
"respectively among children under age five"	respectively, among children under age of five"
Materials and Methods	
"Buea Head District"	Why in Buea?
"conducted in 4 health areas"	What does this mean?
"Cochran's formula {m/30/}"	Referencing problem
"The sample size was calculated using Cochran's formula $\mbox{\{m/30/\}},$ "	Despite providing the reference, I think is more useful to provide the formula and defining the parameters in the manuscript
"Four health areas"	I think you need to explain more on this, how many are there in this District?
"simple random sampling method"	More information is required on how this was achieved.
"snowball sampling technique."	More information is required on how this was achieved
The number of children per households	What was the minimum number of participating children were selected per household? If only one child was selected, how was selected if the household has more than one child fulfilling criteria to participate in the project?
"were collected for a period of three months from February to April 2023"	Collected by who and how the survey was conducted? How the people conducted the survey were trained to familiarize themselves with the questionnaire?
"pretested questionnaire"	Where and how you pretested your questionnaire?
"or severely malnourished respectively".	"or severely malnourished, respectively."
"Simple logistic regression was used to screen predictors at p-value < 0.02"	Why you used p-value < 0.02 during screening the candidate predictor while in multiple logistic regression you used p-value <0.05. I am afraid by using such small p-value in simple regression you may exclude important predictors in your regression.
The mid-upper arm circumference (MUAC)	The age of the children participated in the study is from 0-120 months of age but the MUAC tape is not recommended in children with less than 6 months of age. Can you update the reader how this was addressed in this study?
(WHO) Standard)	I am not sure if this is the correct way of using brackets
Results	
"income of less than 50000FCFA"	I think it require equivalency in more common currency "income of less than 50000FCFA which is equivalent to"
Table 1 - Occupation	I don't know how the question was asked but I am wondering how the women with more than one activities were treated. I think there is a need to provide more information on this predictors.
Table 1 – <=2children	What does this mean
"ranging from 6 to 120 months."	If there was no child below 6 months why you mentioned $0-120$ months and not $6-120$ months.
"More than half of the children 107 (30.2%) were of the age group of 12-59 months"	I think this is not true
"Again, 246 (69.5%) children were"	"Furthermore, 246 (69.5%) children were"
"children were the first of their parents."	Not clear
"Also as regards their vaccine 72 (20.3%) were non-compliant"	Re-write to improve clarity
Table 2 – Age group - < 6 months = 105	But in description the authors said the age range between $6-120$ month. If this description is for female children only, the author should re-write this sentence to reflect this meaning.
Table 2	Birth order need to be re-defined it is difficult to understand
Table 2 - >= 2500	Use the right sign
Table 2 – Vaccine compliance – Complaints – Non complaints	I think it should read "Compliant – Non compliant"
Table 3. Stunting, wasting and BMI status of children aged 120 months	The title does not reflect what is being presented in the table. Children aged 120 months only?



Table 3	I think there is a need of removing frequency and include other variables like children sexes
Results description (nutritional status)	The authors failed to describe the results obtained in relation to the variables being studied i.e. if it stunting how many from rural and urban were stunted and of what age and sex etc. Same apply to
	other categories of nutritional status.
"had a poor source of drinking water"	You need to explain what do you mean by poor source?
"20(5.6%) children were still on exclusive breastfeeding as they were not drinking water yet.	Re-write this sentence to improve clarity
"The blue bar indicates that the child consumed the food type less than once a week"	Re-write to improve the clarity
"Frequency intake of food by the children"	Frequency of food intake in the children"
Figure 1	What is presented in the key is different from what being presented in description
Figure 1	I suggest you create two figures one providing the information on the food call and another providing the information on frequency otherwise improve the information on the key of the figure.
Figure 1	The last two labels in the Y – axis are not complete – Potatoescocoy???
The Food Diversity Score of children 120 months and below	The Food Diversity Score in children of 120 months of age and below
"consumed by each child, taking into consideration their age group"	There is a wide range of the age among the participating children, does this have any effect on the scores to establish dietary intakes? Putting into consideration every age group has its own dietary requirements.
A total of 80(22.6%) had a low score indicating a poor dietary intake (Fig.2)	You need to explain the relationship of score and dietary intake otherwise it will be difficult for the reader to establish which is good and poor dietary intake in relation to the scores obtained.
Factors associated with malnutrition of infants aged 0-60 months	Without title numbering it is a bit confusing
Factors associated with stunting among children aged 0-60 months	
Table titles (generally)	The titles are not self-explanatory, this is for all tables.
Tables 4, 5, 6, 7	I am not sure if it is a good practice to present the significant variables only. I expected to see each variables included in the final modal whether it is statistically significant or not.
Discussion	
Selected health areas	I think there is need to mention the names of the selected health areas right from the Materials and Methods. The description of the study areas is required to enable the reader to understand the study areas. There is categorization of rural and urban areas, does each study area has rural and urban areas or the areas themselves are classified as rural and urban areas?
"Tole is less developed"	Compared to which area and how you reached to such conclusion?
"attributed to the educational setting of Buea."	Can you provide more information on this?
"which may be indicative of the high standard of living in the area."	In which health area? Remember you said Tole is less developed, this is a bit confusing.
"social context of the community"	Preliminary study areas description could have made your work easier.
"not having an acceptable dietary score."	You need to make this clear right from the material and method and results section (what is acceptable and not acceptable) otherwise it is difficult to appreciate this here
within the BHD	What is BHD?
These findings compared to the results of the study carried out by Arimond and Ruel {m/27/} are the same.	Grammar
"some women still do not have good knowledge of the importance of proper nutrition for their children"	Was this studied in this study? Did you considered the access before reaching to this conclusion?
"Inadequate source of drinking water" "drank from a poor source of drinking water"	These are two different things
"About 26.6% of children in this study drank from a noor	



	Grammar
source of drinking water"	Giannia
About 26.6% of children in this study drank from a poor source of drinking water which was associated with stunting	I did not see this in your analysis and results
"Poor sources of drinking water are linked to poor sanitation"	I am not sure if this is true otherwise provide the reference
"Children with non-compliance to vaccine uptake were more likely to be stunted than children who had taken their vaccine"	Re-write this sentence
"Vaccine non-compliance could be due to either dropout by mothers of the children or missed opportunities from the healthcare personnel."	Not clear
"physical activity which all have a significant impact on nutritional outcomes."	Please crosscheck on this
"more than two children were more likely to be malnourished"	Of which age?
"This could be due to low purchasing power because"	You collected the information on income, number of children and nutritional status, is there any relationship reveled by this study among these three variables?
To the Delegation of Public Health to provide healthcare access to address underlying health conditions in the community that may contribute to the poor nutritional status of children.	Not clear
To the Quarter heads and other authorities such as Non-Governmental Organizations to educate mothers on the importance of healthy eating habits by their children which take into consideration diverse nutritious foods	Grammar