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.

I would like to start by congratulating the authors on the conceptualization, data collection, analysis and writing the manuscript. Malnutrition in children is still a big problem in Africa and studies to establish causes of malnutrition in different areas are important to assess local factors that could increase this burden.

Abstract

Results:

The first statement highlights percentages totaling to more than 100%.*(Overall malnutrition status showed that the prevalence of stunting, wasting, underweight, overweight and obesity were 137(38.7%), 34(9.6%), 50(23.6%), 49(35.4%) and 143(66.5%) respectively.)* It is not clear how these were calculated.

Some important factors could would be average age of the children, overall prevalence of under and over-nutrition among the children.

Is this 22.4% value for the mothers or children? It is not clear. *(For dietary diversity, 79 (22.4%) had a low score, indicating a poor dietary intake).*

Background

Background has some concrete generalized ideas, however lacks specificity for the area of study. Why was the BHD community chose for the study? Are there factors in the community that made the researchers think the prevalence of malnutrition was different from other areas in the country. Are there any region specific practices or traits that made the researchers choose this particular community?

Most of the background highlights malnutrition in children under five years. Seems adding children aged over five to six years was an after thought. Why do the researchers think this group of children (6-10 years) is important?

Researchers need to read on referencing and present the parenthetical and narrative citations correctly.

Methods

Concept of health areas is not clear. Were these hospitals or health centers? Since this paper is being read internationally, please make this clear. (*The study was a community-based cross-sectional investigation conducted in 4 health areas in the Buea Head District, from February to May 2023.*)

Break this into two separate sentences (*Mothers/caregivers resident in the Buea Health District for at least six consecutive months with children aged 10 years and below who gave consent were included, children with certain factors that affect their nutritional status such as birth defect, physical disability sickle cell, HIV were excluded.*)

Please write the correct details of the Cochran's formula. (*The sample size was calculated using Cochran's formula???????{m/30/}????????, using an estimated prevalence of stunting (29%) as reported byAmungwa and collaborators in 2021?????/ {m/31/}??////, a minimum sample size of 317 was calculated*).

Why was snowballing used as a sampling technique for the participants if they were in a health setting? Please clarify.

Results

Table 1 highlights the demographic characteristics of the caregivers. The details on employment and occupation are pretty confusing. Although most of the caregivers were unemployed, they all had occupations. Could it mean that the caregivers were self employed? Could the question of employment have self employed as an option? You can see that 132 respondents report they are in business (self employed). This could contribute to a wrong conclusion that most of the caregivers did not have a source of income, because the question asked did not cover all the options comprehensively. Monthly income further shows the caregivers have a source of income.

Table 2 showing demographic characteristics of the children is missing a description under birth weight of the children (where there were only 2). Need to align birth order and vaccine compliance properly.

For the nutritional status, different methods were used to assess the status. They should be presented differently. Putting them together created confusion. Methods used to assess stunting, wasting and BMI were different hence avoid presenting everything together as this results in wrong total percentages. The BMI is a good indicator to assess the nutritional status for children aged 5-17 years, however for children aged under five years weight, height and weight for height Z scores are used. I suggest you reanalyze the data using the correct analysis for the specific age groups.

18% is not a quarter of the children….. (*An assessment of the source of drinking water revealed that, about one-quarter of the children, 65 (18.1%)*). Further explain what is meant by poor source of drinking water.

Can you provide a summarized description of figure 1? which of the foods was most consumed? the last two foods are not clear

How long were these children breastfed during each session? *(In assessing the feeding type of the infant before 6 months, we found that 181 (51.1%) of the children were exclusively breastfed and 144 (40.7%) of infants were breastfed less than 10 times a day.)*

The food diversity score of children under 120 months is not clear. Most of the children were exclusively breastfed. How was breast milk classified? Who placed the foods in different categories? The respondents or researchers. Provide more details on how these results were arrived at.

For children aged 61-120 months I suggest you use the categories values found under BMI to find factors associated with the various nutrition status. Stunting and wasting is more for children under 5 years.

Discussion

How do you explain the correlation of stunting of children whose caregivers stayed at home and worked in private sector?

What community factors could contribute to the low dietary score? are the foods assessed commonly consumed in the community? are there other foods that were not assessed that are consumed in the community? Again please recheck the assessment of dietary scored queried above. There is poor referencing in the discussion. Several statements are not properly cited.