

Peer Review File

Article information: <https://dx.doi.org/10.21037/jphe-22-36>

**Reviewer A**

Overall this article is a good start to exploring the nutrition transition in Argentina because it gives a comprehensive review of overweight and obesity prevalences by region, however the article would need to go further to expand on exposure factors to be a significant article. A lot of the data on overweight and obesity over the past two decades is readily found on international websites. The immense amount of different percentages reported is a bit overwhelming for the reader because it is hard to make concluding statements. For this to be significant, the author would need to also do a narrative review of the factors that influenced the prevalence, although this is a good start. Additionally, there are many typos in the article that need to be addresses.

The reporting of prevalences with little discussion on factors does not seem to fit in a public health emergency journal, because the readers do not know what to do with the information. This article is missing the WHY and the WHAT NOW and therefore it is hard to move forward with it as an emergency.

**Reply:** We welcome your comments and suggestions.

**Abstract:**

- Opening sentence is a run-on
- Line 42: 26,5% typo, and add in units after 23 and 30
- Line 43: 23.1,30.0% typo
- Line 44: Not a complete sentence. Add in semi colon or change to two sentences
- Key words: space typo between obesity and Argentina

**Reply:**

- The opening sentence was modified, was divided in two.
  - the writing of results and conclusions was modified
- Changes in the text: we have modified our tex in result and conclusions (see page 2, line 37-44)

**Introduction:**

- Line 65-81: Specific info about Argentina's geographic area, population and climate is unnecessary here. Instead the introduction should be directly related to Argentina's nutritional landscape
- The introduction is missing a literature review about Argentina's nutritional past including studies that show overweight/obestiy prevalence and studies examining factors that influence overweight/obesity outcomes in Argentina.

**Reply:**

The introduction was modified, eliminating paragraphs on the geography of Argentina and incorporating information on the nutritional panorama.

Changes in the text: We simplify the description of Argentina and incorporate the nutritional outlook under the subheading Socioeconomic context and nutritional outlook in Argentina.(see page 4, line 79-110)

**Methods:**

- A lot of this section is passive using the word “were” very often. Possibly change to active voice.

- Line 113: Referred or Refereed

- Line 116: Typo in sentence beginning with “Were”

- Line 123: Typo in “comparison”, should be plural

- The methods section should include the methodological information about the national surveys and programs, including details of the measures and how they were measured. Some of this information should be moved from the Results section, but still needs to be elaborated on.

**Reply:** methodological information on national surveys and programs was included and the information on results was transferred to methods.

Typographical errors were corrected throughout the manuscript.

Changes in the text: the Methods section was modified to include tables, search strategies, survey methodology and data analysis.(see page 6-7, line 128-162)

**Results:**

- Move all methodological information about the measures and variables to the Methods section

- Line 145: analyze spelled wrong

- Line 172-193 discusses individual and regional factors that resulted in different obesity and overweight outcomes, however there is no statistical significance reported. If these studies did not run significance testing, possibly find other studies that look at these exposure factors

- Line 212: There is mention of the factors that resulted in variations but no indication of the magnitude or direction of correlation.

- Line 251: 95% CI typo

- Line 252: State the p-value directly rather than only  $p < 0.05$

- The results section does a good job of covering all regions, however it is very hard to understand all the different overweight and obesity percentages and make a conclusion out of it since there is an overwhelmingly large amount of different percentages. It would be better to understand the factors rather than the sole prevalences

**Reply:**

-methodological information was transferred to Methods.

-Statistical significance tests were included in the results.

- Clarified the direction of the variances
  - The typographical error was corrected
  - Significance values were changed to p-values.
  - Percentages cited were decreased and obesity factors were incorporated.
- Changes in the text: we incorporate the p value (see page 8, line 186-192)  
we incorporate obesity factors (see page 8-9, line 193-213)

**Discussion:**

- It is good to compare to other countries but this needs to be elaborated on in order for the readers to understand why there are differences in these countries. What are the factors that impact these countries differently?
- Line 339-340: Good job starting to explore the factors, but need to elaborate with actual evidence from other studies rather than making broad claims of what you think
- Line 349: Expand on these results from other studies
- Good discussion of the dietary patterns from other studies
- The limitations section needs to expand. Examples are cross-sectional study, lack of exploration of exposure factors in the surveys, the varying range of populations makes it hard to compare prevalences without context.

**Reply:**

- we expand the information with probable causes
  - Other aspects were added in the limitations section, according to suggestions.
- Changes in the text: see page 11, line 257-267 and page 14, line 347-350

**Figures:**

- Figure 1 and 2 are very hard to interpret what the x-axis is and what the population is. There are very few labels.
- The tables are good but are rarely discussed in the results section. Need to expand on this statistical test.

**Reply:** Due to an unintentional error, Figures 1 and 2 were sent without the axis references. However, taking into account the suggestions we decided to change them to tables showing the prevalences of overweight and obesity in the selected articles, according to type of study, period and region, and national surveys. In addition, a Forest plot was added to visualize more clearly the prevalences of excess weight (overweight+obesity).

Paragraphs commenting on the tables were included in the results section.

Changes in the text: comments from the tables were incorporated (see page 7-8, line 165-192)

**Reviewer B**

**Major Comments:**

This manuscript looks to me as a summary of the obesity rate among Argentinean

children. The nutritional transition was mentioned in the title and the content of the manuscript but was confusing and unclear. Thus, I think nutrition transition should be explained detailed and clear in a separate paragraph and make a logical and organized association with overweight and obesity in the purpose paragraph (last paragraph). There are many factors affecting obesity, and it looks like nutrition transition is one of them.

In the methods, the authors stated that “We used data sources from national surveys and programmes as well as reports from national and international agencies and selected scientific publications that reported prevalence of overweight and obesity in contexts of nutritional transition in the country, in children and adolescents.” Thus, the results didn’t include information about nutrition transition.

Lines 40-45 (abstract) – The authors draw a general result with the obesity rate from the paper they presented. I think the authors need to describe how they came up with these obesity rates (data analysis) in the methods or somewhere.

In general, the background contains unnecessary information and is very unorganized. For example, the dimensions of Argentina and detailed population numbers (lines 65-73) are unnecessary and confusing. If you want to talk about dimensions and populations, you can summarize them. For example, “Argentina is located in the extreme south of the American continent and represents one of the largest areas on Earth (11). Argentina has over 40 million people with 56.6% of the total concentrated in the metropolitan area of Buenos Aires and Greater Buenos Aires (12).” It looks like the population is mainly urban. The region part also should be summarized and eliminate unnecessary information.

It is necessary to have a descriptive topic sentence for each paragraph to improve clarity and understanding throughout the manuscript.

The method is very unorganized, confusing, and includes a lack of information. Evaluation methods should be described in detail. For example, the authors should describe how they produced figures and tables in detail. Inclusion criteria were not described other than search terms.

I think the manuscript should focus on overweight and obesity in Argentinean children and adolescents, not undernutrition, underweight, and/or women/adults. Since the authors used malnutrition a lot in the results, malnutrition should be defined in the background part of the manuscript.

Studies that were discussed in this manuscript included too many details, and it was hard to follow. It was very unorganized, and the primary conclusion was unclear in the majority of papers that were presented. Studies should be grouped based on a better rationale (topics) instead of grouping them based on the data type. For example, it could be by age, gender, region, and time period or other way.

Lines 152-159- Is the SUMAR programme cross-sectional data collection? What is the SUMAR programme exactly? How do they collect data? What is the first level of care for children? What is the public sector? What are health monitoring requirements? It should be helpful to describe the population in detail. The same details are needed in the other programme data that were presented in the manuscript.

Tables 1-2 were cited before Cohort studies. It looks like Table 1, 2, and 3 are the summary of the results. The flow of the results should be changed. For example, present the summary of results at the beginning of the results and then present specific papers under the subtopics. Or present individual papers (It also could be in a table) first under subtopics, then present the summary of results at the end. It could be useful to have a table that describes individual papers by age, gender, region, and time period instead of figures 1 and 2, which were not helping much. See an example table in the paper that I shared in the link at the beginning of my review.

Figures 1 and 2 is lack details and very confusing. What do 1-13 in figure 1 and 1-26 in figure 2 means? Were they data numbers? If they are, it should be defined in the footnotes. Which bar represents which? Is it obesity, overweight, or excess weight? In the cohort studies, trends of obesity prevalence should be indicated in rates (%) instead of point change. For example, Obesity rates among children and adolescents in the city of La Plata increased between 1966-2005 based on XXX data (resource). Among children and adolescents in the city of La Plata, the prevalence of overweight increased from XX% to XX% ( $p = XX$ ), while the prevalence of obesity showed a nonsignificant increase from XX% to XX% ( $p = XX$ ) between 1996-2015 based on XXX data (resource).

The discussion needs better organization and clarity as well as improving content. The conclusion also needs clarity. There are some implications in conclusion. I think these implications could be shared in the Implications for research and practice part after the conclusion.

**Reply to Major Comments:** we welcome comments and observations.

-The Introduction was organized with paragraphs referring to the nutritional transition and the nutritional outlook of Argentina.

Changes in the text: see page 3, line 54-69

-The association with the last paragraph (purpose of the work) was improved.

Changes in the text: see page 5, line 117-123

-An item on data analysis was added in Methods, where the statistical procedures performed are explained.

Changes in the text: see page 7, line 154-162

-The Introduction was modified, eliminating part of the description of Argentina. Subtitles were included to organize the wording.

Changes in the text: see page 3-5, line 53-126

-Inclusion criteria were expanded, a table with combinations of search terms and a table

with search strategies is included.

-We focused the manuscript on overweight and obesity.

-The results of the studies were simplified, eliminating part of the percentage data and reorganized according to sex, period, region and age group.

Changes in the text: the results were organized under subheadings (see page 7-10, line 164-227)

-Details of national surveys and programs were expanded and referred to the Methods section.

Changes in the text: see page 6-7, line 140-153

-The results were reordered.

Changes in the text: the results were organized under subheadings (see page 7-10, line 164-227)

-By unintentional error, Figures 1 and 2 were sent without the axis references. However, taking into account the suggestions we decided to change them to tables showing the prevalences of overweight and obesity in the selected articles, according to type of study, period and region, and national surveys. In addition, a Forest plot was added to visualize more clearly the prevalences of excess weight (overweight+obesity).

### **Minor Comments**

The manuscript had too many grammatical and punctuation errors. Thus, language editing by a native English speaker would improve the manuscript.

**Reply:** we have revised the manuscript to eliminate grammatical and punctuation errors and performed idiomatic revision

In-text citations should be revised for correction. For example, in line 196 - it looks like these two resources: (Kovalsky et al 2003) (31) are the same but writing them this way is confusing and seen like there are two different resources. It should be used either way, not both ways [(Kovalsky et al 2003) (31)] in the manuscript. The reference list also should be revised.

**Reply:** citations were reviewed

For the English publication: in the reference list, the authors should list the English version of resources if they are available.

**Reply:** the references were corrected and the corresponding references were placed in English.

Lines 27-31- First sentence in the abstract is very long. It would be better to break it two sentences for clarity.

**Reply:** The first sentence was modified by dividing it into two sentences.

Changes in the text: see page 2, line 27-30

Line 36- Chi<sup>2</sup> should be spelled out as a chi-square test.

**Reply:** Chi<sup>2</sup> was corrected by chi-square test.

Changes in the text: see page 2, line37

Line 39-45 – This content is results, not conclusions. Conclusion (a couple of sentences) should include information about what you draw based on the results.

**Reply:** The conclusions were modified

Changes in the text: see page 2, line 41-44

Line 88 – Spell out NCD since it was used the first time in the background.

Does edition mean data point (the year data was collected)? I think the cycle is a better word than edition. For example, in the United States, a lot of researchers use the NHANES 2019 cycle instead of the 2019 edition.

**Reply:**edition refers to the year in which the data were taken and is a denomination used in Argentina.

Line 193- Figure 1 was stated. Figure 1 should be stated in line 130, which is the first sentence of the 1. National surveys and programmes. In general, figures and table numbers should be provided in the beginning, not in the last paragraph of the topic.

**Reply:** references to tables and figures were modified. Were placed at the beginning of the paragraph

Changes in the text: see page 7-9, line 165-215

Lines 290-291 – Obesity rate difference among regions is not a discrepancy. There should be a different terminology to describe the difference in regions.

**Reply:** the word discrepancies was changed to differences