Author's response to reviews

Title: Correlates of stunting among children in Ghana

Authors:

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Author's response to reviews: see over
Dear Editor,

SUBMISSION OF REVISED MANUSCRIPT 1877372161055388 - Correlates of stunting among children in Ghana

I write to submit our revised manuscript for your consideration and publication. We have improved the written English and revised the entire manuscript for typo errors. We are sure that the manuscript has been improved and look forward to your acceptance for publications. We have included a point-by-point response to the reviewers comments below. Once again, we wish to thank the reviewers for their comments.

Yours faithfully,

Eugene Kofuor Maafo Darteh
eugenedarteh@gmail.com
Reviewer's report

Title: Correlates of stunting among children in Ghana

Version: 4 Date: 12 February 2014

Reviewer: Amy Luke

Reviewer's report:

Major Compulsory Revisions: 

1. My primary concern at this point is the need to improve the written English.

Response: The English has been improved and changes made have been highlighted in yellow

Below are the specific changes we have made to the written English

Abstract

Background

Line 1. ‘shows’ has been changed to ‘is’

Methods

Line 4. ‘was’ has been changed to ‘were’

Results

Line 3. ‘age’ has been changed to ‘aged’

Line 8. ‘mother’s’ has been changed to ‘mothers’

Line 10. ‘years’ has been inserted between ’35-44’ and ‘being’

Introduction

Line 2. Inserted ‘who die’ between ‘age’ and ‘from’

Paragraph 7. Line 3. The sentence ‘However, there is a paucity of literature on the correlates of stunting in the country using nationally representative data set’. has been
changed to ‘However, there is a paucity of literature on the correlates of stunting based on nationally representative data set in the country’

**Conceptual framework**

Line 2. Sentence ‘There are several models to explain the determinants of child health, however, for the purpose of this paper, the conceptual hierarchical framework for analysing determinants of nutritional status by Hien and Hoa [14] was adapted (see figure 1)’. has been changed to ‘There are several models to explain the determinants of child health. For the purpose of this paper, however, the conceptual hierarchical framework for analysing determinants of nutritional status developed by Hien and Hoa [14] was adapted (see figure 1).’

**Date and methods**

Paragraph 6. Line 5. ‘was’ has been changed to ‘were’

Paragraph 7. Line 4. ‘anthropomentric’ has been changed to ‘anthropometric’

Paragraph 8. Line 11. Deleted ‘were’ between region of residence and replaced with ‘was made up of’

Paragraph 8. Line 21. ‘category’ has been replaced with ‘categories’

**Results**

**Background characteristics of children**

Paragraph 2. Line 3. Inserted ‘were’ between ‘children’ and ‘from’

Paragraph 2. Line 4. Replaced ‘compared to’ with ‘whereas’

Paragraph 2. Line 4. Inserted ‘were’ between ‘children’ and ‘from’

Paragraph 3. Line 1. Replaced ‘have with ‘had’

Paragraph 3. Line 2. Replaced ‘have with ‘had’

**Multivariate Analysis**

Paragraph 2. Line 19. Replaced ‘are with ‘were’
2. The discussion is still somewhat lacking in the description of the relevance of the study and integration with other studies of stunting in West Africa/Ghana.

**Response:** The discussion has been improved and the changes made highlighted in the manuscript

**Discussion**

Paragraph 1. Line 2. Inserted ‘developed’ between ‘status’ and ‘by’

Paragraph 2 has been reworked to read ‘Age of child was found to be a significant determinant of stunting with children aged 24 months and above being more likely to be stunted. This finding is consistent with previous studies which show that stunting is high among children of that age [7]. This could be due to the fact that by age 18-23 months children in Ghana would have already been introduced to complementary feeding [7].’ instead of ‘During age 18-23 months children have already been introduced to complementary feeding and the irregularities of their feeding starts to manifest given that stunting is a long term effect of inadequate nutrition [7]. In this study, age of child was found to be a significant determinant of stunting with children aged more than 12 months being more likely to be stunted’.

Paragraph 3 has been reworked to read ‘Our study corroborates the finding of Badasu [15] and Gyimah [16] who have reported that there are variations in stunting among ethnic groups in Ghana. We observed some variations in stunting among ethnic groups with children from the Ewe ethnic group being less likely to be stunted compared
to Akans. These variations could be attributed to the fact that some ethnic groups in Ghana have beliefs which prevent pregnant women and infants from eating some foods. These foods may contain some nutritional elements needed for the optimal growth and development of the child’. Instead of ‘The current study also notes some variations in stunting among ethnic groups with children from the Ewe ethnic group been less likely to be stunted compared to Akans (OR=0.55, p<.05). This finding is consistent with Badasu [15] and Gyimah [16] who have reported that there are variations in stunting among ethnic groups in Ghana. These variations have been attributed to the fact that, some ethnic groups in Ghana have beliefs which prevent pregnant women and infants from eating some foods. These foods may contain some nutritional elements needed for the optimal growth and development of the child’.

Paragraph 5 has been reworked to read ‘This study corroborates observation made in previous studies regarding wealth status of child’s household and stunting [17, 18, 19]. Our study observed a significant relationship between household wealth and stunting with children from richer households being less likely to suffer from stunting. It could be explained by the fact that rich people are able to afford good living conditions that may improve the child’s health including nutrition [20]’. Instead of ‘Wealth status of child’s household is related to stunting [17, 18, 19]. Similarly, this study reveals that children from richer households were less likely to suffer from stunting (OR=0.43 at p< 0.001). It could be explained by the fact that rich people are able to afford good living conditions that may improve the child’s health including nutrition [20]’.
Paragraph 6 has been reworked to read ‘The results of the study is consistent with a previous study which revealed that mothers who give birth at very early age are likely to give birth to children with low weight at birth [13]. For instance, children whose mothers were aged 25-34 years were less likely to be stunted compared to those whose mothers were aged 15-24 years. This could be as a result of the fact that young mothers require adequate nutrition to fully grow into adults; thus, they struggle with their children over the little food the mother eats [14]’. instead of ‘Mother’s who give birth at very early age are likely to give birth to children with low weight at birth [13]. The results of the study revealed that mother’s age was significantly related to stunting among children. For instance, children whose mother’s were aged 25-34 years were less likely to be stunted compared to those whose mother’s are aged 15-24 years. This could be as a result of the fact that young mothers require adequate nutrition to fully grow into adults thus they struggle with their children over the little food the mother eats [14]’.

Paragraph 7 has been reworked to read ‘The findings of our study corroborates previous studies which have observed that children with many siblings are more likely to suffer from malnutrition [14, 21]. For instance, we observed that children whose mother’s had 5-8 children were more likely to be stunted compared to those whose mother’s had 1-4 children. This could be due to the large level of consumption of resources in the household [10, 22]’ . instead of ‘Children with many siblings are more likely to suffer from malnutrition [14, 21]. This could be due to the large level of resources of consumption in the household [10, 22]. A significant relationship was observed between number of children and stunting among children. For instance, after the addition of proximal factors
in model 3, it was observed that children whose mother’s had 5-8 children were more likely to be stunted compared to those whose mother’s had 1-4 children (OR=1.3, p<0.05).

Paragraph 8. line 4. The sentence ‘Also, the representativeness of the sampling strategy as well as the nationwide nature of the data enhances the study’s generalizability to other settings’. Has been changed to ‘Also, the representativeness of the sample enhances the study’s generalisability to other settings’. 
Reviewer's report

Title: Correlates of stunting among children in Ghana

Version: 4 Date: 21 February 2014

Reviewer: Olukemi Amodu

Reviewer's report:

The manuscript is much improved. The statistical methods are better described and the results are more focused. The discussion is also much improved.

Minor Essential Revisions

The discussion can still be improved upon. It is not enough just to reference findings from previous studies. The findings of this study should be discussed in relation to previous studies done either to corroborate or contradict. e.g "Children with many siblings are more likely to suffer from malnutrition (14,21). This could be due to the large level of consumption of resources in the household. Our study corroborates this, we observed a significant relationship between........

1. Response: The discussion has been improved and the changes made highlighted in the manuscript. Based on the suggestions of the reviewer, we have linked our results to others. Changes have been highlighted in yellow