Reviewer's report

Title: Determinants of malnutrition in children and the uptake of interventions to prevent the condition

Version: 2 Date: 29 July 2015

Reviewer: Oswin Grollmuss

Reviewer's report:

Dear authors,

this is a fine article of yours on malnutrition und the necessary interventions to prevent the conditions.

I have some comments for discretionary revisions that I would like to recommend to you.

1. The ABSTRACT is concisely written. In my opinion it just suffers from a lack of clarity in what are conditions leading to malnutrition and what are sequels of the disease. I'll explain this point later when I come to the results and the discussion section. In line 42 you write "in this population". There, I think, you should be more precise and explain with some few additional words which population you mean because you stipulate targeted intervention on "this population".

2. INTRODUCTION: It is correct when you mention that malnutrition is a risk factor globally but you should emphasize that it is in particular a regionally important condition (you cite for instance Muller et al who write about problems in developing countries, and it is indeed there where malnutrition has its greatest impact. Correctly you state the risk factors for malnutrition, and I prefer that you maintain the risk factors and possible sequels of malnutrition to be treated separately.

It is interesting that you write about antenatal and postnatal care but you do not differentiate between political strategies such as enhancing birth spacing or reducing teenage pregnancy and medical prophylactic diagnosis and treatment (for instance reducing low birth weight by better antenatal observation).

In line 67 you write “little evidence to support the effectiveness...”. Perhaps shorter “for the effectiveness”?

3. METHODS: Could you perhaps add some words on MUAC and its relation to malnutrition and the more precise measurements weight for height? This might help readers who are not so familiar with the topic to better understand your method strategy.

4. RESULTS: In line 142 it might sound better “the children ranged from the age of 6 months to 51 months”.


As mentioned before, after having identified the relationship of examined parameters with malnutrition please try to separate causes of malnutrition from sequels of the disease. This might illuminate better your arguments in the following discussion (concerns also faltering: cause or sequel?).

You indicate that following table 4 uptake of measles vaccine and vitamin A was much lower in malnourished children than in controls. This conclusion seems not to be justified as p values are not significant for the difference.

5. DISCUSSION: In line 189 instead of “a similar picture was found…” better “a similar pattern…”?

It might be difficult to compare 1990 results for age with your present results as you compare a median (for non normal distribution) with an average. At least, drawing a conclusion from these different findings might be difficult.

When you write about developmental delay in malnourished children once again it might be helpful to discriminate whether you write about retardation as a condition or a sequel of malnutrition. One could imagine that developmental delay occurs often in families of lower social standard and therefore may be a pre – malnutrition condition as well as a sequel. Might it be possible for you to differentiate these different conditions?

In line 217 you might add: “it is reassuring to note that “A” or “THE” majority…”

You write that delivery room may not be the best place for discussing all the nutritional needs of a child. From your statistical findings, could you give a p value for this statement (this is not evident from table 3)?

Line 237 to 252: I am not sure that this is a subject of your work and I am not sure either that your study in its present form supports the value for early detection of faltering growth as nothing in your study is said about the prophylactic aspect of monitoring growth for the prevention of malnutrition. I imagine that you have examined this aspect in other parts of your greater study, and it should be published with these data rather than in the present study. In fact, you may rise the question or demand for such studies but the statistics of your present study does not at all highlight the need for such a political strategy.

6. As a conclusion, I think that you have written a valuable article on malnutrition problems in young children especially in developing countries that deals with the state of art and perspectives of diagnosis, treatment and prophylaxis of the condition. Your article merits publication, and I would like to encourage you to go further in this domain with your future publications as you have already indicated.

Kindest regards,
Oswin Grollmuss.

**Level of interest:** An article of importance in its field
Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests