Author’s response to reviews

Title: Diet satisfaction and associated factors among adult surgical orthopaedic patients admitted at a teaching hospital in Lusaka province, Zambia; A hospital-based cross-sectional study

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Author's response to reviews:

Dear Editor,

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Diet satisfaction and associated factors among adult orthopaedic patients admitted at a teaching hospital in Lusaka province, Zambia; A hospital-based cross-sectional study

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BMC Nutrition

REVIEWER 1: Jorja Collins

Line Points Action(s) taken or rebuttal

Abstract: It is not clear that the population is orthopaedic patients. Response - Change effected to highlight the fact that the study focused on orthopaedic patients starting with the title.

Please describe which variables were analysed for correlations and associations. Response - The variables that were correlated were age categories, marital status, sex, education level, monthly income and days of stay in hospital. See results section.

Key words: Please review mesh headings and revise keywords. Suggest add in 'foodservice'. Response - Change effected.
41-42 Line 41-42 needs to be referenced. Response - Change effected and citations included.

Introduction: The scope of the study and the operational definitions need to be incorporated into the body of the introduction. Please review the structure of other papers published in this journal. Response - Change effected.

You report that the aim is to "establish reasons and type of meals supplemented in a teaching hospital" but how you measured this is not reported in the method, and these results are not reported. Response - This was a typo and change has since been effected.

Method: Please report that ethics approval for this research was obtained. The method repeats information in different aspects. Please ensure there is no duplication, and appropriate information is reported under each heading. Response - Noted and changes effected.

81 There is some inconsistency with the description of the sample - e.g. line 81 >=3 days, line 73 >5 days. Please clarify. Response - Noted and change effected.

The method needs to describe the foodservice system at the hospital. E.g. how many meals are provided? How many choices? Is the food cooked fresh onsite? Is it delivered from elsewhere? Who are the people who deliver the meals? Is the menu on paper or electronic? Please also describe the differences in foodservices between high and low cost wards.

Response - Information about the food service system is not available in literature at the hospital, hence the investigators collected it via interviews with the Senior Catering officer. The information has since been made available in the section under Additional information from relevant food service staff.

It is unclear how you established the questions to be asked. Did you take different questions from 4 different tools to make your own list of questions? This means that the tool is no longer valid as it is not used in its original form. This needs to be addressed as a limitation.

Response - Questions were taken from a tool used in a similar study. Issue has been addressed under the section of Research instruments.

The method reports that you combined response options into 'satisfied' and 'dissatisfied' and also considered the likert scale responses as scores, but this does not appear to have been done in the results. Please remove if this was not the method followed. Response - The issue has since been addressed in results section.

Please specify which variables were explored in the chi2 tests and the correlations. Response - The number of categorical variables analysed using chi-square test have been specified in results section.

Please describe the number of participants included/excluded in this section, not in the methods. Response - It was difficult to exactly pin-point the number line since it was not specified in the comments.
Please combine Table 1, Table 2 and Figure 1 into 1 table as these all report demographic characteristics of the patients. In future studies, it would be useful to also collect data on the weight, BMI, nutritional status (e.g. assessed by SGA tool), type of diet of patients as this is useful to understand who the population are. Response - Change has since been effected and observations have been noted.

You report that you conducted chi2 testing and correlations, but these results are not reported at all. Response - A table with output of chi-square has been provided in the results section.

The discussion does not adequately interpret the results and their implications for hospitals and future research. Suggest the authors review other papers or guidelines for writing a discussion. Response – Discussion has been revisited and adjustments made accordingly.

The demographic characteristics have been over interpreted and compared to other studies. The main point you need to consider is whether the study participants are representative (or not) of the patient group, and other hospital patients. Response – Noted and issue has since been addressed. See discussion.

You have attempted to interpret the implications of the results for hospitals and dietetic practice, but this could be expanded more. Providing a summary of the foodservice system, the menu and the dietetic service in the method will give you the opportunity to build on this in the discussion. How do the results you see reflect the foodservice system that is available? What specifically needs to be changed to address the low satisfaction? E.g. Is it a problem with the menu, or is it a bigger problem around the system, or lack of guidelines on hospital foods, or the money available for foodservices in hospitals etc. Response – Results have since been interpreted to reflect gaps in the food service system at the hospital.

There is greater opportunity to describe the implications of low satisfaction on the satisfaction of patients as well as their nutritional status and clinical outcomes. We know patients who are less satisfied eat less, which influences their malnutrition risk and in turn this influences their health outcomes. This will create the rationale for proposing changes. Response – Noted but information about nutrition status was not part of this study. We just that future studies to consider that dimension. What the study has endeavoured to do is provide baseline information.

Studies on foodservice satisfaction in western countries generally show high satisfaction with hospital foodservices. Why do you think your findings are different? Are there differences in healthcare quality in developed and developing countries that explain this?

What further research needs to be done? Response – Issues raised are valid and attempts have been made in the discussion to address them.
Inconsistent style used, and not in keeping with the journal requirements. Please review journal requirements and reformat.  Response – Changes made accordingly

REVIEWER 2: Alison Yaxley

Line  Points  Action(s) taken or rebuttal

Brief but generally adequate with attempts at providing rationale for the study. I think this would be strengthened by expanding the content. While there is little literature published in this setting it would be useful to provide some statistics in other countries against which to assess the findings. For example, rates of malnutrition are high in developed countries and given the differences in developing countries this would strengthen your rationale for investigating the food service.  Response – Point noted and changes to expand context made to the background.

It would also be useful to have some information on the food service at this hospital which may contribute to the satisfaction. For example are meals plated in the kitchen and transported or plated on wards?  Response - Information on foodservice has been provided under the results section. This is because the information was not available in literature but obtained via interviews with relevant catering staff.

The second part of the aim is not clear and therefore not sure that the rationale is well made. This should be clarified. The scope of the study does not seem to consider the second part of the aim.  Response - Noted and change effected. The second part has since been dropped because it seems not to add lots of value to the article.

The operational definitions should be integrated into the methods and some rationale and references should be provided. For example, why select that age group?  Response - Noted and change effected.

91-93  Some inconsistencies in the methodology. For example, at the end of paragraph one the population is identified as those who have been admitted for 5 or more days but in the second paragraph the inclusion criteria is those who have had a hospital diet for 3 or more days. There also needs to be some rationale for these cut-offs; why 5 or more days?  Response - The issue has since been clarified and change effected. Rationale for the cut-off has been provided.
How many items were in the questionnaire and how long did it take? Important to have an idea of potential participant burden. Response - The questionnaire had 9 items and duration of interviews has since been included.

Who collected the data? Were they involved in care of the patients? It is not clear and may influence the feelings of the patients in terms of whether they participate (pressure to do so) or in satisfaction (so as to please the data collector). Response - Data collection was done by two research assistant who were not members of staff at the hospital. A section on recruitment and training of research assistants has since included to address the issue.

It is not clear where the data to answer the second part of the aim (establish reasons and type of meals supplemented in a teaching hospital) comes from. Response - This has been dropped. Seems it was a serious typo.

Data analysis plan indicates tests for parametric data. Was normality assessed prior to selecting these tests? Response - Test of quantitative variables for normal distribution was done using the Kolmogorov-Smirnoff test, as appropriate.

Given the age of the participants in this study, I would assume that the injuries were as a result of trauma rather than age-related falls. It would be useful however to provide some information on the type of injuries expected in this setting in the background. Response - Under methodology section it is clearly mentioned that the hospital is the major trauma centre in Lusaka.

128 Line 128 - presume this should be Table 1? There is no Table 3.1. It is useful to compare the data between genders as well as looking at the total sample. Response - The issue has since been addressed

137 Line 137 - Table 3.2? Response - Noted and change effected.

140 Line 140 - add 'per month'. Response – Noted and change effected.

A lot of demographic findings are presented in the results however there does not appear to be any description in the methods on how this information was gathered. Response – Noted and change effected, a description is made that the instrument had two sections which included collecting information on demographic characteristics.

Figure 1 - if fractures were not as a result of trauma how did the fractures come about? Response – clarification has been made and corrections have since been made to results.

No results to contribute to the second part of the aim 'establish reasons and type of meals supplemented in a teaching hospital'. Response - Second part of the aim has been dropped.
No results for Chi-square or correlation analysis presented. Noted that p values presented in the abstract but nowhere else and no indication of effect size. Response - Results of chi-square have now been presented.

The first paragraph of the discussion should present a brief overview of the key findings of the study before moving on to discuss key findings. Response - Noted and changes have since been made in the discussion.

The first four paragraphs discuss demographics and do not contribute to meeting the aim. While these aspects may affect satisfaction no data has been presented that examined satisfaction by eg gender, income. The discussion would be strengthened by focussing on the findings that address the aim. Response - The observations are valid and changes have since been effected in the discussion.

The discussion indicates results of correlation analysis but these findings have not been presented. Response - The findings are since been included in the results section.

Overall the discussion needs a total rewrite to focus on the findings that address the aim. If there are no findings to address the second part of the aim that should be removed. Response - Noted. The second part of the aim has since been removed.

Line 232 - no indication that the sample size is too small. What is this statement based on? Response - Noted. The statement has since been addressed.

Yours sincerely

Nixon Miyoba