June 15, 2019

Dear Editorial Office,

Thank you to all the editors and reviewers for thoroughly reviewing our manuscript, “A Systematic Review of Nutrition Screening and Assessment in Inflammatory Bowel Disease” and providing insightful suggestions and edits. This has considerably improved our manuscript.

Below we have provided a point-by-point response to all reviewer’s comments. We appreciate the opportunity to re-submit our article to your journal.

Sincerely,

Suqing Li MD
Puneeta Tandon MD MSc FRCPC
Maitreyi Raman MD MSc FRCPC
on behalf of all co-authors

Reviewer 1:

1. **The authors seek to examine if Nutritional Screening Tools (NST) and Nutritional Assessment Tools (NAT) in IBD to determine (i) the prevalence of abnormalities (ii) if screening tools are correlated with assessment tools (iii) and if NSTs and NATs are associated with clinical outcome. While all questions are interrelated a more refined/focused question would enhance the quality of the systematic review.**

Author's Response:

Thank you for this thoughtful suggestion. While we agree with these comments for reviews in general, given the relatively limited number of studies in this field, our group felt it was most feasible to examine these entities in a single review (as opposed to dividing them up into separate manuscripts). As well it allowed us to provide a thorough overview of nutrition screening and assessment techniques in IBD.

2. **In evaluating the retrieved papers the authors do not attempt to critically appraise the quality of the study. In particular if the appropriate statistical analysis have been performed.**

Author's Response:

Thank you for pointing out the importance of critical appraisal. We have provided an updated review of the quality and risk of bias of the included studies via a modified version of the Newcastle Ottawa Scale that has been recommended by the Cochrane group for observational, non-interventional studies.

In a detailed discussion with our systematic review team and medical biostatistician, we have confirmed that the appropriate statistical analyses have been performed. As such, the statistical methods were assessed on a case-by case basis when extracting data.

3. **The detail provided for the search strategy needs to refined and the different terms used in each database detailed. It is unclear why there is such a large difference in the number of studies retrieved in PubMED (994) and Medline (512).**

Author's Response:

Thank you for identifying these discrepancies in our search result reporting. We have reviewed this with our medical librarian, updated the MEDLINE search strategy in the

appendix and our PRISMA diagram in the figures. As it was an error in reporting, this has not changed any of the articles that were identified.

4. **In addition the reasons for the exclusion of 1504 records need to be recorded.**

Author's Response:

Thank you. We have re-reviewed our articles from the initial search and provided a more detailed account of excluded articles. Reasons for exclusion can be seen in our updated PRISMA diagram and results section.

5. **It is difficult to interpret the different studies designs included/excluded. Case control studies are included yet the authors state that "records were excluded if there were no prospective clinical outcomes evaluated". The broad range of aims may have led to this discrepancy.**

Author's Response:

Thank you for bringing this to our attention, we have clarified the "study selection" section to more clearly indicate that studies were excluded if they did not evaluate any prospective clinical outcomes AND/OR did not have any comparison's between NSTs and NATs (in which cross-sectional and case control studies could be included).

6. **In assessing the quality of the studies it is unlikely that 14/16 studies were of good quality. A risk of Bias Table would greatly benefit the manuscript. Table S1 should provide some critical evaluation for different quality metrics on the NOS.**

Author's Response:

Thank you for highlighting the importance of incorporating a validated risk of bias tool to assess the quality of studies. Given that the majority of our studies are non-randomized non-interventional observational studies, traditional risk of bias tools such as the RoB 2 and ROBINS-2 recommended by Cochrane for interventional studies are not applicable for our included studies. Although there are many tools available for assessing methodological quality and risk of bias in non-randomized studies, the Cochrane handbook version 5.1 notably highlights the New-Castle Ottawa scale as well as the Downs and Black instrument as likely the most useful of available tools[1]. We have included this statement in our "Methods" section.

[1] Higgins J, Green S (editors). Cochrane Handbook for Systematic Reviews of Interventions Version 5.1.0. 2011.

We have repeated the quality assessment of the 16 studies using a modified version of the New-Castle Ottawa scale (Table S2) and additionally included the specific metrics used in the NOS to assess each study in the supplementary appendix (Table S3).

7. **The referencing of the reviewed studies should be much more precise so that the reader can identify easily which study the author is referring to. In addition, some of the studies included in Tables are missing reference numbers.**

Author's Response:

We have reviewed our manuscript and added references where missing within the body and tables.

8. **The discussion is more reflective of the lack of validity of any of these measures and possibly reflects the authors frustration rather that the findings of the SR.**

Author's Response:

Thank you for this comment. The general lack of validity and evidence for NST/NATs in the IBD population is by itself an important finding, as it identifies a need for further rigorously designed studies to inform optimal clinical care. Despite this we would draw attention to the primary points of the discussion where we highlight the many strengths and conclusions that can still be drawn from the available data to incorporate into clinical practice. For example, we have made tentative recommendations for the most useful NSTs based on currently available data, as well as highlighted aspects of study worthy of future exploration. We have revised our discussion and conclusion to highlight this.

Reviewer 2:

This is an interesting review paper on nutrition screening and assessment in IBD. The authors present detailed methods used, critical evaluation of the literature, and important conclusions.

Authors Response: Thank you for taking the time to review our article and for providing their positive critique

Reviewer 3:

The research was to systematically review the prevalence of abnormalities on NSTs and NATs, whether NSTs are associated with NATs, and whether they predict clinical outcomes by comprehensive searches performed in Medline, CINAHL Plus and

PubMed. Included: English language studies correlating NSTs with NATs or NSTs/NATs with clinical outcomes in IBD. Excluded: review articles/case studies; use of BMI/laboratory values as sole NST/NAT; age <16. The research topic is innovative, the theoretical basis is solid, the experimental data is reliable, the statistical method is correct, the proof is sufficient, the conclusion is basically credible, the writing of the thesis is more rigorous, and the language expression is accurate. The research results have certain theoretical significance and clinical application value.

Authors Response: Thank you for taking the time to review our article and for providing their positive critique.

Author's response to editor:

Thank you for taking the time to thoroughly review our manuscript. All stylistic edits and additions to the manuscript suggested by the editor have been made.