August 26, 2013

Lian-Sheng Ma
President and Company Editor-in-Chief
World Journal of Diabetes

RE: Number ID:4768

Manuscript Title: *Effect of Ethnicity on Weight Loss Among Adolescents 1 Year After Bariatric Surgery*

Journal: World Journal of Diabetes

Dear Dr. Ma,

Please find attached our revised manuscript previously entitled "**Effect of Ethnicity on Weight Loss Among Morbidly Obese Adolescents 1 Year After Bariatric Surgery: Results from the Bariatric Outcomes Longitudinal Database"** now titled **"Effect of Ethnicity on Weight Loss Among Adolescents 1 Year After Bariatric Surgery"** for consideration as an original article contribution to the *World Journal of Diabetes*. We appreciate the time that the reviewers took to examine our work and to provide suggestions. By following these suggestions we have improved our manuscript. Our responses, highlighted in yellow throughout the text, are summarized as follows:

Reviewer #1:

Comment: Interesting paper.

Response: Thank you. We appreciate your comment.

Reviewer #2:

Comment: This is a retrospective study that compared three different populations: Hispanics; Non-Hispanic Whites, and Non-Hispanic Blacks, using anthropometric measurements. No difference of body weight change was observed, which is different from a recent report (Admiraal WM, et al. Obese Surg 2013 Jul 3. [Epub ahead of print]), in which in terms of weight loss, gastric bypass surgery is less effective in African, South Asian, Turkish and Moroccan patients than in their ethnic Dutch counterparts.

Response: The authors would like to thank the reviewers for pointing out this new reference. We feel it is important to include given the topic of our analysis and have this added the reference and the following sentence to the discussion section on page 10: "Additionally, in the Netherlands, Admiraal et al[22] found that African, South Asian, Turkish and Moroccan patients lost less weight at 1-year post-gastric bypass surgery versus their ethnic Dutch counterparts."

Comment: The most important, when comparing gastric banding with gastric bypass, RYGB, but not gastric banding, results in sustained effects in improved metabolic phenotype, thereby resulting in different weight change in long-term between two different procedures. In addition, "those undergoing gastric bypass surgery were significantly heavier than those undergoing adjustable gastric band surgery" (should be surgeries), therefore the subjects who undergone gastric bypass may loss more weight than those with gastric banding, which need to be discussed in the section of Discussion.

Response: We have now added to page 10 of the Discussion section the following sentences: "Our analysis found that type of surgery significantly influences weight loss, however and thus must be a consideration for adolescents considering this alternative; gastric bypass surgery resulted in significantly more weight loss at 1-year versus adjustable gastric band surgery. Therefore, gastric bypass may be a viable option for those who are in need of more weight loss to resolve co-morbidities that have already developed."

Response: On the top of page 9 the sentence now reads "…..BMI was reduced more among those who underwent gastric bypass surgeries than among those who had adjustable band surgeries."

Comment: Minor Please simplify the title in all Tables.

Response: All table titles have been shortened and simplified as per this reviewer's suggestion.

Reviewer #3:

Comment: This is a very interesting and well-written study testing whether there is a relationship between outcomes of bariatric surgery and ethnicity among adolescents. However, the results of this analysis could be changed by confounding factors. The potential impact of the grade of obesity before surgery and the surgical intervention (by pass, banding, sleeve …) should be analyzed in separate analyses.

Response: We appreciate this reviewer's comment and completely agree with the possibility that surgery type and age could be potential confounders which is precisely why we controlled for them in all of the regression models. In table 1 we show the principal covariances that may affect the analysis if they are not considered in the model. Table 1 shows that BMI categories (one of the main outcomes) are significant different by age, gender and type of surgery, so we used them as covariance in the model. We make specific mention to this as a footnote in all tables. Also, in the analysis section on page 8 where we state "in all three categories, BMI was reduced more among those who underwent gastric bypass surgery than among those who had adjustable band surgery ($P<0.001$) (data not shown on tables)." There were no patients included in this analysis who had a sleeve surgery.

Furthermore, we were unable to stratify by ethnicity AND surgery type because of the large loss-to-follow up at 12 months left us with many empty cells and we did not feel confident in reporting these outcomes.

We included table 6 as a separate analysis to show the effect of presurgery BMI on post-surgery weight loss, as this reviewer mentions.

Reviewer #4:

Comment: There are some limitations in the scope of this paper: 1. Follow-up was very incomplete and was not longer than one year.

Response: We agree and acknowledge this limitation in the discussion section.

Comment: Gastric bypass and adjustable laparoscopic band patients should have been separated.

Response: Please see response to same comment above. Additionally, we have included our original publication of this dataset, reference #9 (Messiah SE, Lopez-Mitnik G, Winegar D, et al. Changes in weight and comorbidities among morbidly obese adolescents undergoing bariatric surgery: 1-year results from the Bariatric Outcomes Longitudinal Database (BOLD). *Surg Obes Rel Disord*. 2013;9:503-13) that did in fact stratify by surgery type. Unfortunately, as pointed out above attrition was a major challenge and it was therefore not possible to stratify by ***both*** surgery type ***and*** ethnicity simultaneously.

Comment: The %EWL was modest compared to other studies.

Response: This may be a result of having both surgery types combined. Indeed we found in our previous analysis (cited above) that those who underwent gastric bypass surgery lost approximately twice the weight of those who underwent adjustable gastric band surgery 1 year post surgery.

Comment: It would be helpful to know more about the 26 patients with nutritional complications as this is of great concern in this patient group.

Response: We agree with this reviewer's comment but unfortunately this information was not available to report.

Reviewer #5:

Comment: Could you describe the indication of bariatric surgery for adolescents?

Response: Due to this reviewer's comment we have added the following sentences to the 'Patient Selection' section on page 6: "All patients had met the National Institutes of Health criteria for bariatric surgery.[18] Thus, all patients had a BMI >35 kg/m^2 and ≥1 co-morbidity (e.g., elevated blood pressure, hypercholesterolemia) or a BMI >40 kg/m^2." Reference #18 is now: NIH Consensus Development Conference Panel. Gastrointestinal surgery for severe obesity: NIH consensus development conference, March 25–27, 1991. Nutrition, 12 (1996), pp. 397–404.

Comment: Could you describe the selection of bariatric surgery, gastric bypass or adjustable gastric banding for candidates?

Response: We appreciate this reviewer's question and unfortunately cannot answer it as we do not have this information. In general, there is no standard definition of who or which patient gets selected for gastric bypass or adjustable band surgery.

Comment: What do you think the difference between the adults and the adolescents? How about the influence of parents?

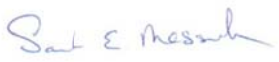
Response: This is a very interesting comment. To the authors' knowledge this has not been reported in the literature. Nevertheless, we added a sentence to the discussion on page 11 as follows "Parental influence over post-operative adherence to quality nutrition and physical activity recommendations may partially explain the lack of ethnic group differences."

Reviewer #6: Bariatric surgery is populur and in children is new.1,The obesity indices of child is like adult.2,The date come from different hospital,the way of bariatric surgery is same.

Response: Indeed, the BOLD data includes surgeries from over 350 practices representing approximately 85% of all facilities nationwide performing at least 10 bariatric procedures per year (only Vermont and New Mexico were not included). Only gastric bypass surgery and adjustable gastric band surgery were included in this analysis (no sleeve surgeries were analyzed) because at this time these are the only two types of bariatric surgery available for adolescents and adults.

We would like to express our gratitude for the opportunity to submit the revised version of our manuscript. We look forward to your comments, edits and suggestions.

Sincerely,



Sarah E. Messiah, Ph.D., M.P.H., Corresponding Author
Research Associate Professor of Pediatrics
University of Miami Leonard M. Miller School of Medicine
Department of Pediatrics
Division of Pediatric Clinical Research
Batchelor Children's Research Institute, Room 541
1580 NW 10th Avenue
Miami, FL 33130
Tel: (305) 243-1943 Fax: (305) 243-8475
E-mail: smessiah@med.miami.edu