

OBSTETRICS & GYNECOLOGY



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- Comments from the reviewers and editors (email to author requesting revisions)
- Response from the author (cover letter submitted with revised manuscript)*
- Email correspondence between the editorial office and the authors*

**The corresponding author has opted to make this information publicly available.*

Personal or nonessential information may be redacted at the editor's discretion.

Questions about these materials may be directed to the *Obstetrics & Gynecology* editorial office:

obgyn@greenjournal.org.

Date: Oct 25, 2018
To: "Adela G Cope" [REDACTED]
From: "The Green Journal" em@greenjournal.org
Subject: Your Submission ONG-18-1817

RE: Manuscript Number ONG-18-1817

Postpartum contraception in Somali women: A population-based study

Dear Dr. Cope:

Your manuscript has been reviewed by the Editorial Board and by special expert referees. Although it is judged not acceptable for publication in Obstetrics & Gynecology in its present form, we would be willing to give further consideration to a revised version.

If you wish to consider revising your manuscript, you will first need to study carefully the enclosed reports submitted by the referees and editors. Each point raised requires a response, by either revising your manuscript or making a clear and convincing argument as to why no revision is needed. To facilitate our review, we prefer that the cover letter include the comments made by the reviewers and the editor followed by your response. The revised manuscript should indicate the position of all changes made. We suggest that you use the "track changes" feature in your word processing software to do so (rather than strikethrough or underline formatting).

Your paper will be maintained in active status for 21 days from the date of this letter. If we have not heard from you by Nov 15, 2018, we will assume you wish to withdraw the manuscript from further consideration.

REVIEWER COMMENTS:

Reviewer #1: This is a thoughtful retrospective cohort highlighting postpartum contraception choices by a relatively new immigrant population in the United States, Somali women, compared to non-Somali women. I commend the authors for bringing attention to a growing community with unique challenges and risk factors that may not be familiar to Green Journal readers.

Title:

1. Consider adding "in Olmsted County, Minnesota". Based on the title, I originally thought the article would be based on research in Somalia

Abstract:

2. The methods sections may be expanded to include the methodology to explain the results in line 67-69.

3. The conclusion uses "the first comparison" - I recommend this should be supported in the paper with literature search terms used and when the search was performed.

Introduction:

4. In lines 83-88, consider adding the population with whom the Somali women were compared to when determining they are at increased risk for adverse pregnancy outcomes.

5. Consider adding to the introduction the role of government insurance in this community as 81% of Somali women were insured by the government. Do patients in the Somali community often have insurance prior to pregnancy? Did the government insurance cover LARC during the study period? Did government insurance cover immediate postpartum LARC placement during this time period? How did non-government insurance coverage of contraception differ from government insurance coverage during the study period? Does government insurance lapse after delivery?

Material and Methods:

6. Line 106: Jan 2009 - Dec 2015 (7 years) vs Line 145 (in Results): "8 year study period"

7. Line 106-107: Non-Somali women are not well defined. Please consider adding additional demographics of this group including race, immigration status, etc

8. Line 111: Please expand how the cohort was confirmed by chart review. Could some of these Somali women be second generation? If so, consider separating them out from the first generation who were likely identified by the natural language processing. This alluded to in Line 259 as a weakness

9. Line 136: mentions 336 patients needed or power to detect difference however the groups have 317 patients - please explain

Results

10. Line 145: see comment 6

11. Line 155: did the Somali women have insurance prior to pregnancy?

12. Line 156: were the Somali women seen by the medical system prior to pregnancy? Could this be a product of lack of medical insurance or other barriers to access?

13. Line 161: Does government insurance lapse after delivery?

14. Line 181: were those with pre-pregnancy contraception more likely to have non-government insurance? I am trying to figure out if you have subgroups of Somali women with different behavior and whether that can be partially explained by insurance coverage.

15. Line 182: states that insurance and other variable were not significantly associated with postpartum contraception however only 55 Somali women had insurance and showed for postpartum follow up (17% of the Somali cohort). Please consider adding power here needed to detect difference

Discussion:

16. Line 191 - see comment 3

17. Line 210 -does insurance coverage play a role?

18. Line 229-230 - Could this be secondary to counseling on postpartum service? Was birth control plan decided by discharge? Was there immediate pp contraception provided during this time period? Consider adding information when prescription written/insertion date in relation to delivery date.

19. Limitations by comparison group to Caucasian can be expanded upon as it is interesting that pregnancy outcomes were similar between the two groups given known disparities among African American women and Caucasian women

Reviewer #2: In this manuscript, the authors present a study investigating the postpartum contraceptive habits of Somali women. The study is based out of Minnesota and relies on the Rochester Epidemiology Project database. The Somali and non-Somali cohorts were identified and the use of contraceptives across these 2 cohorts is compared. A multi-variable logistic regression model was then conducted to identify factors associated with postpartum contraception use among the Somali women. Overall the study pretty straightforward and the methods are appropriate and credible. The big question is why should the Green journal be interested in discussing this question in this population as opposed to other immigrant or even native populations? Plausibly the reader could take this info and try to be more focused on this issue among their Somali women - although arguably many/most OB/GYNs across the country may not have this opportunity. The diaspora has created some population clusters of Somali women so some docs see a lot of Somali women (like I do) while other docs see very few (like most private docs practicing in the same community). I wonder if this kind of document would be better suited in a more focused journal. Beyond this, identifying the problem is arguable the easier issue. Convincing Somali women to use contraception in the postpartum period is likely going to be the bigger problem. I have the following specific questions/comments:

1) Precise - I don't think it's necessary to say this manuscript is a first of kind in the US.

2) I think I know what a natural language processing algorithm is but perhaps this could be better explained particularly in the context of identifying the nationality of a patient. Was there any discrepancy between the algorithm and the chart review confirmation?

3) Obstet Gynecol. 1999 Jun;93(6):1014-20. - please review in how you report your logistic regression.

4) The identified weakness of not knowing if a patient actually used the contraception that was chosen at postpartum is significant - this could be featured in the methods to highlight the limitation earlier in the manuscript.

5) The control group may exaggerate the difference in contraceptive use across the 2 cohorts.

Overall, simple study relying on a reliable database and simple statistics. The only major issue with the manuscript relates to if this topic would appeal to a broad OB/GYN audience.

Reviewer #3: This is a novel retrospective study comparing Somali women with age-matched non-Somali women with regard to the use of postpartum contraception defined as contraception within 12 months after delivery.

Objective

-Line 49 You present a novel study specific to Somali women in the United States however the term "Somali women" may not accurately represent your studied population. It is unclear whether "Somali women" refers to females who directly immigrated from Somalia to the United States, or who are of Somalian descent in the United States. In the latter case, questions may arise as to whether they are 1st generation immigrants or later due to possible sociocultural differences affecting attitudes and behavior [1].

Introduction

-Line 88 In demonstrating that Somalis have higher risk for adverse pregnancy outcomes, have there been any plausible explanations that make a case for a stronger push towards a higher uptake of postpartum contraception? Some background regarding adverse pregnancy outcomes and postpartum contraception is important. Also consider a brief description of Somali culture and perceptions regarding contraception to provide contextual background in interpreting your study results.

Materials and methods

-Line 105 A specific definition of "Somali women" should be stated.

-Lines 108-111 The description of how the Somali cohort was identified by chart review is insufficient. It is unclear what methods were used for identification of patient's national origin.

-Line 112 Were there women who had multiple births within the 8-year study period and how was this handled?

Results

-Line 159 The disproportionately large percentage of Somalis with less than a high school education in your study may have skewed the study results. It has been documented in the literature that a higher level of education is associated with increased likelihood of contraceptive use [2,3]. An analysis of different groups stratified by level of education should be reported. Consideration should be given to matching the comparison group not just by age, but by level of education to minimize the confounding effect of level of education.

References

1. Rumbaut, R. G. (2004). Ages, life stages, and generational cohorts: decomposing the immigrant first and second generations in the United States 1. *International migration review*, 38(3), 1160-1205.
2. Ayoub, A. S. (2004). Effects of Women's schooling on contraceptive use and fertility in Tanzania. *African population studies*, 19(2).
3. Bbaale, E., & Mpuga, P. (2011). Female education, contraceptive use, and fertility: evidence from Uganda. *Consilience*, (6), 20-47.

STATISTICAL EDITOR COMMENTS:

The Statistical Editor makes the following points that need to be addressed:

Table 1: The groups differ in many baseline characteristics, notably education, gravidity, parity. One cannot discern from these characteristics how the groups might differ in desire for future children and therefore probability of accepting contraception.

Tables 2,3: These comparisons are among Somali women only. Would be of interest to compare with non-Somali women re: education levels, parity quartiles etc. Or, could have matched initially on more than maternal age to determine whether it was Somali vs non-Somali characteristics alone that contributed to the association with contraception use. That is, these Table provide more information re: factors with Somali women cohort that were associated with contraception use, but do not address comparisons vs non-Somali women.

EDITOR COMMENTS:

Thank you for your submission. You will receive comments from me in addition to those of the peer reviewers and

statistical reviewers. I have several concerns that need to be addressed:

- a. Please consider either submitting this simply as a descriptive study of contraception practices among postpartum Somali women in the first year after birth OR redoing your comparison group. Using Somali v Non Somali resulted in having major difference in education and government insurance, both of which could confound your results. If you don't want to report just the descriptors, the please match on one of these other two characteristics, if not both.
- b. I worry that cultural differences that you describe in your discussion may be being somewhat ignored here. You state in the abstract, that the differences found, underlie need to improve counseling. Do they?
- c. Your introduction emphasizes poor pregnancy outcomes but you don't do anything with that information. I would eliminate it.
- d. As written, you have a narrowly defined population--Somali women in Olmstead County so generalizability of any conclusions is rather limited. Why would the doc in practice in, say, Florida, care about this population? It seems to me you have a terrific opportunity with your paper to use the findings to explore issues related to the provision of ethnically and culturally different life planning goals between (in particular, but not exclusively) immigrants and the dominant culture among MD's in the US. You allude to this as a factor (Somali culture values large families, etc) but in my mind this would be the power of the work you have done and be the reason why the doc in practice not dealing with a small number of Somali refugee women in Minnesota would find your work valuable.

I recognize that what I am asking for is a complete re-do of the paper and that you and your co-authors may not agree with these requests and observations. Unfortunately, as it is at the moment, your paper would not be acceptable. I totally understand if you would prefer to move on to a different journal. Please let me know your thoughts at nchescheir@greenjournal.org. My assistant at the journal is Randi Zung (rzung@greenjournal.org). please copy her on your reply.

If you intend to proceed with submitting a revision, you will need to notify us to confirm. We may have a second set of Editor's Comments to send to you that will need to be incorporated into your revised manuscript.

2. The Editors of Obstetrics & Gynecology are seeking to increase transparency around its peer-review process, in line with efforts to do so in international biomedical peer review publishing. If your article is accepted, we will be posting this revision letter as supplemental digital content to the published article online. Additionally, unless you choose to opt out, we will also be including your point-by-point response to the revision letter, as well as subsequent author queries. If you opt out of including your response, only the revision letter will be posted. Please reply to this letter with one of two responses:

1. OPT-IN: Yes, please publish my response letter and subsequent email correspondence related to author queries.
2. OPT-OUT: No, please do not publish my response letter and subsequent email correspondence related to author queries.

3. Author Agreement Form: Petra M Casey, MD did not indicate a conflict of interest disclosure. Please submitted an updated form with the revision.

4. Standard obstetric and gynecology data definitions have been developed through the reVITALize initiative, which was convened by the American College of Obstetricians and Gynecologists and the members of the Women's Health Registry Alliance. Obstetrics & Gynecology will be transitioning as much as possible to use of the reVITALize definitions, and we encourage authors to familiarize themselves with them. The obstetric data definitions are available at <http://links.lww.com/AOG/A515>, and the gynecology data definitions are available at <http://links.lww.com/AOG/A935>.

5. Because of space limitations, it is important that your revised manuscript adhere to the following length restrictions by manuscript type: Original Research reports should not exceed 22 typed, double-spaced pages (5,500 words). Stated page limits include all numbered pages in a manuscript (i.e., title page, précis, abstract, text, references, tables, boxes, figure legends, and appendices).

Please limit your Introduction to 250 words and your Discussion to 750 words.

6. Title: Would it be possible to edit the title to indicate that the population is Somali women in the United States?

7. The most common deficiency in revised manuscripts involves the abstract. Be sure there are no inconsistencies between the Abstract and the manuscript, and that the Abstract has a clear conclusion statement based on the results found in the paper. Make sure that the abstract does not contain information that does not appear in the body text. If you submit a revision, please check the abstract carefully.

In addition, the abstract length should follow journal guidelines. The word limits for different article types are as follows: Original Research articles, 300 words. Please provide a word count.

8. Only standard abbreviations and acronyms are allowed. A selected list is available online at <http://edmng.ovid.com/ong/accounts/abbreviations.pdf>. Abbreviations and acronyms cannot be used in the title or précis. Abbreviations and acronyms must be spelled out the first time they are used in the abstract and again in the body of the manuscript.

9. The journal does not use the virgule symbol (/) in sentences with words. Please rephrase your text to avoid using "and/or," or similar constructions throughout the text. You may retain this symbol if you are using it to express data or a measurement.

10. Line 71 and Line 191: We discourage claims of first reports since they are often difficult to prove. How do you know this is the first report? If this is based on a systematic search of the literature, that search should be described in the text (search engine, search terms, date range of search, and languages encompassed by the search). If on the other hand, it is not based on a systematic search but only on your level of awareness, it is not a claim we permit.

11. Please review the journal's Table Checklist to make sure that your tables conform to journal style. The Table Checklist is available online here: http://edmgr.ovid.com/ong/accounts/table_checklist.pdf.

12. Figures 1–2: Please upload either the original figure type for these images (Word, PPT, or Excel), or upload high resolution versions.

13. If you choose to revise your manuscript, please submit your revision via Editorial Manager for Obstetrics & Gynecology at <http://ong.editorialmanager.com>. It is essential that your cover letter list point-by-point the changes made in response to each criticism. Also, please save and submit your manuscript in a word processing format such as Microsoft Word.

If you submit a revision, we will assume that it has been developed in consultation with your co-authors, that each author has given approval to the final form of the revision, and that the agreement form signed by each author and submitted with the initial version remains valid.

Again, your paper will be maintained in active status for 21 days from the date of this letter. If we have not heard from you by Nov 15, 2018, we will assume you wish to withdraw the manuscript from further consideration.

Sincerely,

Nancy C. Chescheir, MD
Editor-in-Chief

2017 IMPACT FACTOR: 4.982

2017 IMPACT FACTOR RANKING: 5th out of 82 ob/gyn journals

In compliance with data protection regulations, please contact the publication office if you would like to have your personal information removed from the database.

Dear Dr. Chescheir:

Thank you for your favorable review of our manuscript. We have addressed your comments and the reviewers' comments below and revised the manuscript accordingly. All of the authors have reviewed this version of the manuscript and have approved the revisions.

Reviewer #1: This is a thoughtful retrospective cohort highlighting postpartum contraception choices by a relatively new immigrant population in the United States, Somali women, compared to non-Somali women. I commend the authors for bringing attention to a growing community with unique challenges and risk factors that may not be familiar to Green Journal readers.

Title:

1. Consider adding "in Olmsted County, Minnesota". Based on the title, I originally thought the article would be based on research in Somalia

Response: Thank you for pointing out this possible area of confusion. We have added clarification to the title on Line 1.

Abstract:

2. The methods sections may be expanded to include the methodology to explain the results in line 67-69.

Response: In the abstract we now state in lines 64-65 that "Among Somali women, an apriori list of factors was evaluated for associations with postpartum contraception use by including all of the factors in a multivariable logistic regression model".

3. The conclusion uses "the first comparison" - I recommend this should be supported in the paper with literature search terms used and when the search was performed.

Response: This statement was omitted from the Conclusion section of the Abstract as systematic review was not the focus of this study.

Introduction:

4. In lines 83-88, consider adding the population with whom the Somali women were compared to when determining they are at increased risk for adverse pregnancy outcomes.

Response: In each of these studies, Somali women were compared to non-Somali women who were native-born in the countries to which the Somali women had immigrated. Based on comments from the Editor, these statements have been omitted from the current draft.

5. Consider adding to the introduction the role of government insurance in this community as 81% of Somali women were insured by the government. Do patients in the Somali community often have insurance prior to pregnancy? Did the government insurance cover LARC during the study period? Did government insurance cover immediate postpartum LARC placement during this time period? How did non-government insurance coverage of contraception differ from government insurance coverage during the study period? Does government insurance lapse after delivery?

Response: Thank you for the thoughtful comments on the potential role of government insurance versus nongovernment insurance in the Somali community and the possible choices

they would make regarding contraception use and type of contraception. Unfortunately, some of these questions are not possible to assess with our study. The documentation of insurance coverage status in the Electronic Medical Record at Olmsted Medical Center, one of the two sites involved with this study, does not identify specific subtypes of government insurance, and specific types of services covered will vary slightly. The types of services covered by nongovernmental insurance may also vary, as you have pointed out in your comments. The electronic pregnancy records at Mayo Clinic, where much of the peri-pregnancy demographic data was abstracted, groups all subtypes of governmental insurance into one category. In general, during the study period, no immediate postpartum LARC placement was performed at Mayo Clinic or Olmsted Medical Center, specifically none in our study groups. It is unclear how much of that fact is due to a coverage issue versus a provider choice in practice issue. In general, governmental coverage in Minnesota covers patients into the postpartum appointment. More discussion regarding this topic has been added to the Discussion section of our manuscript in lines 324-327.

Material and Methods:

6. Line 106: Jan 2009 - Dec 2015 (7 years) vs Line 145 (in Results): "8 year study period"

Response: Thank you for catching this discrepancy. This has been fixed to state 7-year study period, which is the correct duration.

7. Line 106-107: Non-Somali women are not well defined. Please consider adding additional demographics of this group including race, immigration status, etc

Response: Definition of non-Somali women provided as well as races and ethnicities that were included in this group in lines 142-146. We have also provided percentages of each race or ethnicity type in the non-Somali group in the Results section of our manuscript (lines 205-214).

8. Line 111: Please expand how the cohort was confirmed by chart review. Could some of these Somali women be second generation? If so, consider separating them out from the first generation who were likely identified by the natural language processing. This alluded to in Line 259 as a weakness

Response: We have added clarification to lines 138-146 clarifying how the cohorts were confirmed by chart review.

9. Line 136: mentions 336 patients needed or power to detect difference however the groups have 317 patients - please explain

Response: Thank you for noting this discrepancy. The original cohorts were 336 of Somali women with 336 age-matched non-Somali women. During chart review, we excluded 2 women who didn't have research authorization, 3 women who did not have a delivery in the EMR, 2 who were not in Olmsted County when they had their delivery, 2 Somali women who were originally mis-classified as non-Somali, and 8 non-Somali women who were originally mis-classified as Somali, resulting in 317 pairs after excluding these women and their matches. This information has been added to the Methods section of our manuscript in lines 153-158.

Results

10. Line 145: see comment 6

Response: Thank you for catching this discrepancy. This has been fixed to state 7-year study period, which is the correct duration.

11. Line 155: did the Somali women have insurance prior to pregnancy?

Response: Unfortunately, these data were not reviewed as part of our study. We focused on the type of insurance coverage provided during pregnancy as this would be the time period during which contraception counseling would be provided and postpartum contraception would be provided.

12. Line 156: were the Somali women seen by the medical system prior to pregnancy? Could this be a product of lack of medical insurance or other barriers to access?

Response: Thank you for your thoughtful comment. This question falls beyond the scope of our study. Unfortunately, these data were not reviewed as we focused primarily on prenatal and postpartum care. Additional details regarding this important factor has been added to the Discussion section in lines 324-327.

13. Line 161: Does government insurance lapse after delivery?

Response: In general, governmental coverage in Minnesota covers patients through the postpartum appointment, thus this should not have resulted in a barrier to this appointment for both Somali and non-Somali women with this type of insurance coverage.

14. Line 181: were those with pre-pregnancy contraception more likely to have non-government insurance? I am trying to figure out if you have subgroups of Somali women with different behavior and whether that can be partially explained by insurance coverage.

Response: We appreciate your consideration of the complexity of this important factor in provision of care in these patients. Unfortunately, as our study focused on postpartum contraception when women with governmental insurance should still have coverage through their postpartum appointment, and we did not obtain data regarding insurance coverage at the time of pre-pregnancy contraception use. Additional details regarding this important factor has been added to the Discussion section in lines 324-327.

15. Line 182: states that insurance and other variable were not significantly associated with postpartum contraception however only 55 Somali women had insurance and showed for postpartum follow up (17% of the Somali cohort). Please consider adding power here needed to detect difference

Response: Looking at factors associated with postpartum contraception among Somali women was an exploratory analysis, not our primary outcome, so we did not include a power statement for this.

Discussion:

16. Line 191 - see comment 3

Response: We have excluded this description of our study.

17. Line 210 -does insurance coverage play a role?

Response: Insurance coverage does not appear to play a role in postpartum contraception use as demonstrated by our multivariable logistic regression assessing factors associated with postpartum contraception use in Somali women. It could potentially play a role in access to pre-pregnancy contraception, which could in turn impact postpartum contraception use. Discussion regarding this important topic has been added in lines 324-327.

18. Line 229-230 - Could this be secondary to counseling on postpartum service? Was birth control plan decided by discharge? Was there immediate pp contraception provided during this time period? Consider adding information when prescription written/insertion date in relation to delivery date.

Response: We agree with your comment that comparable rates of LARC use could be related to counseling, both postpartum and during prenatal care. This comment has been added to the Discussion in line 321. Birth control plan was inconsistently documented in the EMR between the two sites involved with our study, so we are unable to state with certainty if birth control plan was decided by discharge for subjects in our cohorts. It is possible that most may have had a plan in place but that this information was not documented at time of dismissal, thus these data were not included in abstraction. Unfortunately, specific dates regarding when prescriptions were written or when LARC were inserted were not reviewed, though this may have added meaningful information to our analysis and discussion.

19. Limitations by comparison group to Caucasian can be expanded upon as it is interesting that pregnancy outcomes were similar between the two groups given known disparities among African American women and Caucasian women

Response: Thank you for the thoughtful comments. We agree that lack of a difference in pregnancy outcomes was an interesting piece of information we found in our study, however, this component was not directly related to our primary study aims. Based on comments from the Editor, pregnancy outcome discussion has been omitted from the current draft.

Reviewer #2: In this manuscript, the authors present a study investigating the postpartum contraceptive habits of Somali women. The study is based out of Minnesota and relies on the Rochester Epidemiology Project database. The Somali and non-Somali cohorts were identified and the use of contraceptives across these 2 cohorts is compared. A multi-variable logistic regression model was then conducted to identify factors associated with postpartum contraception use among the Somali women. Overall the study pretty straightforward and the methods are appropriate and credible. The big question is why should the Green journal be interested in discussing this question in this population as opposed to other immigrant or even native populations? Plausibly the reader could take this info and try to be more focused on this issue among their Somali women - although arguably many/most OB/GYNs across the country may not have this opportunity. The diaspora has created some population clusters of Somali women so some docs see a lot of Somali women (like I do) while other docs see very few (like most private docs practicing in the same community). I wonder if this kind of document would be better suited in a more focused journal. Beyond this, identifying the problem is arguable the easier issue. Convincing Somali women to use contraception in the postpartum period is likely going to be the bigger problem. I have the following specific questions/comments:

1) Precis - I don't think it's necessary to say this manuscript is a first of kind in the US.

Response: This description has been excluded.

2) I think I know what a natural language processing algorithm is but perhaps this could be better explained particularly in the context of identify the nationality of a patient. Was there any discrepancy between the algorithm and the chart review confirmation?

Response: The natural language processing algorithm is a computer algorithm used to search patient EMRs to identify patients of a certain group. In our institution, this algorithm had previously been assessed for ability to identify Somali patients and was found to have sensitivity of 92.2%, specificity of 99.9%, positive predictive value of 97.5%, and negative predictive value of 99.8%. This information has been added to the manuscript in lines 136-137. We have also added information regarding discrepancy between algorithm and chart review in lines 153-158.

3) Obstet Gynecol. 1999 Jun;93(6):1014-20. - please review in how you report your logistic regression.

Response: We have reviewed the article and feel that our presentation of the methods and results are consistent with the recommendations in this article. In particular, we clearly delineate that the dependent and independent variables, we state that we fit and report the results from a full multivariable model (in Table 2) based on apriori selected variables, and we appropriately report odds ratios and corresponding 95% CIs.

4) The identified weakness of not knowing if a patient actually used the contraception that was chosen at postpartum is significant - this could be featured in the methods to highlight the limitation earlier in the manuscript.

Response: We agree this is a significant limitation of our study. Statement was provided to allude to this limitation in the Methods section in lines 160-161.

5) The control group may exaggerate the difference in contraceptive use across the 2 cohorts.

Response: We agree that differences between the Somali group and control group may exaggerate the difference in contraceptive use between the two groups. We have added the results from a multivariable analysis to the Results section of the manuscript demonstrating an adjusted odds ratio that is still statistically significant as provided on lines 247-250.

Overall, simple study relying on a reliable database and simple statistics. The only major issue with the manuscript relates to if this topic would appeal to a broad OB/GYN audience.

Response: We feel that although our study focuses on the Somali immigrant population within our community, similar differences in culture and practices may be present in other immigrant populations that share similar values to the Somali population (high fertility cultural norms, the economic and social value of having children, perceived attitudes of healthcare providers, opinions of partners, language barriers, religious implications, relatively low health literacy, and lack of familiarity with healthcare delivery and the value of antenatal and postpartum appointments). Further elaboration on this value of our study has been added to the Discussion section in lines 366-374.

Reviewer #3: This is a novel retrospective study comparing Somali women with age-matched non-Somali women with regard to the use of postpartum contraception defined as contraception within 12 months after delivery.

Objective

-Line 49 You present a novel study specific to Somali women in the United States however the term "Somali women" may not accurately represent your studied population. It is unclear whether "Somali women" refers to females who directly immigrated from Somalia to the United States, or who are of Somalian descent in the United States. In the latter case, questions may arise as to whether they are 1st generation immigrants or later due to possible sociocultural differences affecting attitudes and behavior [1].

Response: Thank you for your thoughtful comment. Further explanation of definitions of Somali and non-Somali cohorts has been provided in the Methods section in lines 138-146. We agree that there may certainly be an impact of duration of exposure to Western culture in contraceptive use both in first-generation immigrants and later generation immigrants. We have provided a comment regarding this important limitation and possible area of future study in our Discussion in lines 362-365.

Introduction

-Line 88 In demonstrating that Somalis have higher risk for adverse pregnancy outcomes, have there been any plausible explanations that make a case for a stronger push towards a higher uptake of postpartum contraception? Some background regarding adverse pregnancy outcomes and postpartum contraception is important. Also consider a brief description of Somali culture and perceptions regarding contraception to provide contextual background in interpreting your study results.

Response: Possible reasons that have been proposed regarding why Somalis may be at higher risk of adverse pregnancy outcomes include higher prevalence of short interpregnancy intervals, lack of prenatal care, female circumcision and subsequent birth trauma, increased number of Cesarean deliveries (and of higher order), and grand multiparity. By providing a tool that could be used to assist in pregnancy spacing at recommended intervals or pregnancy prevention altogether, it is possible that these adverse outcomes could be avoided or the risk of them could be reduced potentially. Based on other comments from the article, this area of discussion/focus has been omitted from the current draft of the manuscript. Regarding Somali culture and perceptions of contraception, findings of previous qualitative studies are included in the Discussion in lines 272-278.

Materials and methods

-Line 105 A specific definition of "Somali women" should be stated.

Response: We have added a specific definition of criteria we used to confirm subjects for the Somali and non-Somali cohorts in lines 138-146.

-Lines 108-111 The description of how the Somali cohort was identified by chart review is insufficient. It is unclear what methods were used for identification of patient's national origin.

Response: We have added a specific definition of criteria we used to confirm subjects for the Somali and non-Somali cohorts in lines 138-146.

-Line 112 Were there women who had multiple births within the 7-year study period and how was this handled?

Response: There were women who had multiple births within the 7-year study period. In order to simplify analysis and maintain consistency, we chose to focus on the first pregnancy (index pregnancy) in the study period for our analysis.

Results

-Line 159 The disproportionately large percentage of Somalis with less than a high school education in your study may have skewed the study results. It has been documented in the literature that a higher level of education is associated with increased likelihood of contraceptive use [2,3]. An analysis of different groups stratified by level of education should be reported. Consideration should be given to matching the comparison group not just by age, but by level of education to minimize the confounding effect of level of education.

Response: We appreciate your thoughtful comment regarding the important role of education level and contraception use. In order to account for this difference between Somali and non-Somali women, we have added a multivariable logistic regression model. The adjusted odds ratio in this analysis demonstrates statistically significant difference in contraception use between Somali and non-Somali women, where Somali women are less likely to use postpartum contraception as previously reported in our prior draft. Details regarding the results of this analysis are included in the Results section in lines 247-250.

References

1. Rumbaut, R. G. (2004). Ages, life stages, and generational cohorts: decomposing the immigrant first and second generations in the United States 1. *International migration review*, 38(3), 1160-1205.
2. Ayoub, A. S. (2004). Effects of Women's schooling on contraceptive use and fertility in Tanzania. *African population studies*, 19(2).
3. Bbaale, E., & Mpuga, P. (2011). Female education, contraceptive use, and fertility: evidence from Uganda. *Consilience*, (6), 20-47.

STATISTICAL EDITOR COMMENTS:

The Statistical Editor makes the following points that need to be addressed:

Table 1: The groups differ in many baseline characteristics, notably education, gravidity, parity. One cannot discern from these characteristics how the groups might differ in desire for future children and therefore probability of accepting contraception.

Response: Unfortunately, desire for future children is not consistently documented in the EMR and was not able to be included in analysis. In order to account for the differences in these baseline characteristics, a multivariable logistic regression was performed to assess how these characteristics may impact contraception use between groups, as described in lines 175-187 and lines 247-250.

Tables 2,3: These comparisons are among Somali women only. Would be of interest to compare with non-Somali women re: education levels, parity quartiles etc. Or, could have matched initially on more than maternal age to determine whether it was Somali vs non-Somali characteristics alone that contributed to the association with contraception use. That is, these Table provide more information re: factors with Somali women cohort that were associated with contraception use, but do not address comparisons vs non-Somali women.

Response: Thank you for your sharing your comments. In order to assess the impact of differences between Somali and non-Somali women on contraception use, we have included a multivariable logistic regression analysis as described above and in lines 175-187 and lines 247-250. Regarding the assessment of factors associated with contraception use, we were primarily focusing on describing postpartum contraception in Somali women as this is an area with a paucity of data in the literature. Assessment of factors associated with postpartum contraception use in non-Somali women was felt to be outside the scope of this study.

EDITOR COMMENTS:

Thank you for your submission. You will receive comments from me in addition to those of the peer reviewers and statistical reviewers. I have several concerns that need to be addressed:

a. Please consider either submitting this simply as a descriptive study of contraception practices among postpartum Somali women in the first year after birth OR redoing your comparison group. Using Somali v Non Somali resulted in having major difference in education and government insurance, both of which could confound your results. If you don't want to report just the descriptors, the please match on one of these other two characteristics, if not both.

Response: We agree that the differences in level of education and proportion on government insurance are important to consider in these two groups. Both of these factors may impact contraception use. In order to assess the impact of these differences between Somali and non-Somali women on contraception use, we have included a multivariable logistic regression analysis in lines 175-187 and lines 247-250.

b. I worry that cultural differences that you describe in your discussion may be being somewhat ignored here. You state in the abstract, that the differences found, underlie need to improve counseling. Do they?

Response: We appreciate this thoughtful question. It is important to recognize our own biases and how they impact our interpretation of our results. While counseling practices may be a potential area we could focus on with the results of our study, identifying these differences also adds to our understanding of this patient population and how to best provide care while respecting patient autonomy and cultural differences. We have adjusted the conclusion statement in our abstract to account for this in lines 83-84.

c. Your introduction emphasizes poor pregnancy outcomes but you don't do anything with that information. I would eliminate it.

Response: As recommended, details regarding pregnancy outcomes have been omitted from the current draft of the manuscript. We agree that this is not the main focus of our study and do not add significant information for discussion.

d. As written, you have a narrowly defined population--Somali women in Olmstead County so generalizability of any conclusions is rather limited. Why would the doc in practice in, say, Florida, care about this population? It seems to me you have a terrific opportunity with your paper to use the findings to explore issues related to the provision of ethnically and culturally different life planning goals between (in particular, but not exclusively) immigrants and the dominant culture among MD's in the US. You allude to this as a factor (Somali culture values large families, etc) but in my mind this would be the power of the work you have done and be

the reason why the doc in practice not dealing with a small number of Somali refugee women in Minnesota would find your work valuable.

Response: We appreciate these thorough comments and questions. We agree that while our specific immigrant group – Somali women – has limited generalizability, the values emphasized regarding fertility and relationship to healthcare services and providers is likely similar to that of other immigrant populations. We have explored this topic further by editing our conclusion statement for our abstract in lines 83-84 and by expanding these ideas further in the discussion in lines 366-374.

I recognize that what I am asking for is a complete re-do of the paper and that you and your co-authors may not agree with these requests and observations. Unfortunately, as it is at the moment, your paper would not be acceptable. I totally understand if you would prefer to move on to a different journal. Please let me know your thoughts at nchescheir@greenjournal.org. My assistant at the journal is Randi Zung (rzung@greenjournal.org). please copy her on your reply.

If you intend to proceed with submitting a revision, you will need to notify us to confirm. We may have a second set of Editor's Comments to send to you that will need to be incorporated into your revised manuscript.

2. The Editors of Obstetrics & Gynecology are seeking to increase transparency around its peer-review process, in line with efforts to do so in international biomedical peer review publishing. If your article is accepted, we will be posting this revision letter as supplemental digital content to the published article online. Additionally, unless you choose to opt out, we will also be including your point-by-point response to the revision letter, as well as subsequent author queries. If you opt out of including your response, only the revision letter will be posted. Please reply to this letter with one of two responses:

1. OPT-IN: Yes, please publish my response letter and subsequent email correspondence related to author queries.
2. OPT-OUT: No, please do not publish my response letter and subsequent email correspondence related to author queries.

Response: OPT-IN

3. Author Agreement Form: Petra M Casey, MD did not indicate a conflict of interest disclosure. Please submitted an updated form with the revision.

Response: Updated form will be included.

4. Standard obstetric and gynecology data definitions have been developed through the reVITALize initiative, which was convened by the American College of Obstetricians and Gynecologists and the members of the Women's Health Registry Alliance. Obstetrics & Gynecology will be transitioning as much as possible to use of the reVITALize definitions, and we encourage authors to familiarize themselves with them. The obstetric data definitions are available at <http://links.lww.com/AOG/A515>, and the gynecology data definitions are available at <http://links.lww.com/AOG/A935>.

Response: Reviewed.

5. Because of space limitations, it is important that your revised manuscript adhere to the following length restrictions by manuscript type: Original Research reports should not exceed 22

typed, double-spaced pages (5,500 words). Stated page limits include all numbered pages in a manuscript (i.e., title page, précis, abstract, text, references, tables, boxes, figure legends, and appendixes).

Please limit your Introduction to 250 words and your Discussion to 750 words.

Response: Reviewed.

6. Title: Would it be possible to edit the title to indicate that the population is Somali women in the United States?

Response: This clarification has been made.

7. The most common deficiency in revised manuscripts involves the abstract. Be sure there are no inconsistencies between the Abstract and the manuscript, and that the Abstract has a clear conclusion statement based on the results found in the paper. Make sure that the abstract does not contain information that does not appear in the body text. If you submit a revision, please check the abstract carefully.

Response: Reviewed.

In addition, the abstract length should follow journal guidelines. The word limits for different article types are as follows: Original Research articles, 300 words. Please provide a word count.

Response: Reviewed.

8. Only standard abbreviations and acronyms are allowed. A selected list is available online at <http://edmgr.ovid.com/ong/accounts/abbreviations.pdf>. Abbreviations and acronyms cannot be used in the title or précis. Abbreviations and acronyms must be spelled out the first time they are used in the abstract and again in the body of the manuscript.

Response: Reviewed.

9. The journal does not use the virgule symbol (/) in sentences with words. Please rephrase your text to avoid using "and/or," or similar constructions throughout the text. You may retain this symbol if you are using it to express data or a measurement.

Response: Reviewed.

10. Line 71 and Line 191: We discourage claims of first reports since they are often difficult to prove. How do you know this is the first report? If this is based on a systematic search of the literature, that search should be described in the text (search engine, search terms, date range of search, and languages encompassed by the search). If on the other hand, it is not based on a systematic search but only on your level of awareness, it is not a claim we permit.

Response: We have excluded these claims from the updated draft of our manuscript.

11. Please review the journal's Table Checklist to make sure that your tables conform to journal style. The Table Checklist is available online here: http://edmgr.ovid.com/ong/accounts/table_checklist.pdf.

Response: Reviewed.

12. Figures 1–2: Please upload either the original figure type for these images (Word, PPT, or Excel), or upload high resolution versions.

Response: Original file type will be uploaded for Figures 1 and 2.

13. If you choose to revise your manuscript, please submit your revision via Editorial Manager for Obstetrics & Gynecology at <http://ong.editorialmanager.com>. It is essential that your cover letter list point-by-point the changes made in response to each criticism. Also, please save and submit your manuscript in a word processing format such as Microsoft Word.

Response: Reviewed.

Sincerely,
Adela Cope, MD

Randi Zung

From: Cope, Adela G., M.D. [REDACTED]
Sent: Friday, December 21, 2018 12:12 PM
To: Randi Zung
Subject: Re: [EXTERNAL] RE: Your Revised Manuscript 18-1817R1
Attachments: 18-1817R1 ms (12-19-18v4).docx

Ms. Zung:

Thank you for the clarification. I have attached an updated draft with the requested changes in data reporting. Please let me know if there is anything else I can help with in this process!

Best,
Adela

From: Randi Zung <RZung@greenjournal.org>
Date: Thursday, December 20, 2018 at 12:48 PM
To: "Cope, Adela G., M.D." [REDACTED]
Subject: [EXTERNAL] RE: Your Revised Manuscript 18-1817R1

Dear Dr. Cope:

In the Abstract, for the highlighted statistics please provide CI's which we prefer to p values. Please make sure the data also appears in your body text or in the tables for consistency. Please see v4 (attached).

Please send your next version back to me when you are ready. I will be out of the office until December 26, so you may return your file next week.

Thanks,
Randi

From: Cope, Adela G., M.D. [REDACTED]
Sent: Wednesday, December 19, 2018 9:49 AM
To: Randi Zung <RZung@greenjournal.org>
Subject: RE: Your Revised Manuscript 18-1817R1

Ms. Zung:

I have attached the updated revised manuscript as you have requested. I have responded to comments within the manuscript and have included responses to questions in your previous email in the list below:

1. General: The Editor has made edits to the manuscript using track changes. Please review them to make sure they are correct.
Response: Reviewed edits; agree that they are correct.

[Please note that comments that appear in my name are actually from Dr. Chescheir.]

2. Title: Note edits to title.
Response: Edits noted; agree with change in title.

3. Abstract-Objective: The objective for the abstract should be a simple "to" statement without background. Please note the edits to this sentence.

Response: Edits noted; agree with change in objective statement.

4. Abstract-Results: In the Abstract-Results, please provide absolute numbers as well as whichever effect size you are reporting + Confidence intervals. P values may be omitted for space concerns. By absolute values, I mean something like: "xx (outcome in exposed)/yy (outcome in unexposed) (zz%) (Effect size= ; 95% CI=)." An example might be: Outcome 1 was more common in the exposed than the unexposed 60%/20% (Effect size=3;95% CI 2.6-3.4).

All data that is added to the abstract must also appear in the body text for consistency. Please make sure the numbers you add here are also added elsewhere in the manuscript.

Response: I reviewed this request with our statisticians to ensure that I was changing the reporting of our results appropriately. Would you please provide clarification to which results you would like us to make these changes to? The area that they felt would make the most sense to add these percentages was the last sentence where we reported odds ratios, but as they are from the multivariable model, they weren't sure that the raw rates would match up well with the adjusted ORs we reported here. We are happy to make any adjustments as requested; we just want to confirm what adjustments we should make. Thank you.

5. Abstract-Conclusion: Most people will only read the abstract of a paper and then, if interested, read the paper. Since you are suggesting that your findings in this particular population may help inform thoughts about immigrants in general, could you say something to that effect in your conclusion?

Response: Thank you for your thoughtful comment. I have included an additional comment in the conclusion of the abstract to reflect possible application of the study and its results to other immigrant populations that may share similar cultural practices and beliefs.

6. Starting at Line 104: May be a formatting problem on my computer, but I am not seeing clear separation of paragraphs in your paper (all sections). Could you either insert a blank line between paragraphs or indent at the first line of a new paragraph so that the copy editors can make sure we present your work as you intended?

Response: Thank you for letting me know about the formatting issue. I have indented the first line of all new paragraphs throughout the manuscript for clarity.

7. Line 145-150: Please move these sentence to the Results section.

Response: I have moved these statements to the beginning of the results section as requested.

8. Line 202: This is a side comment and you don't need to do anything about it--this is really for my learning. I'm intrigued by the low rate of mood disorders amongst a group of immigrants, many of whom likely had some very difficult and, at times, harrowing experiences in their home country which may have prompted their immigration to begin with. Do you think the low rate of mood disorder is due to lack of a diagnosis of an existing mood disorder (maybe our tools to screen for these don't work well in this population? Lack of access to care? etc) or do you think that Somali women just aren't as prone to depression? Maybe their food or supplement intake has a higher rate of things similar to St John's Wort to begin with???? Really fascinating.

Response: I agree that this difference likely is the result of multiple factors. I wonder if we are screening effectively in this population and if there may be a component of a language barrier that affects their interpretation of how we screen for mood disorders. I also feel that there is like a component of faith and understanding of life based on their faith background that contributes to this. Many of our Somali patients will reflect on difficult situations by saying that it is Allah's will and that is how they understand and cope with it. They also oftentimes have teas that they consume quite frequently, including on labor and delivery and postpartum, that may include components that are similar to St. John's Wort, though they have told me before it's just regular Lipton tea. It's hard to say!

9. Line 257: When you say: "This may be related....," I read that is an explanation as to why it was less than the non-Somali population but what you are referencing with "This" seems to be why your population had higher rates than others have reported. Could you make the antecedent of "this" non-ambiguous as I may not be the only one who reads it that way?

Response: Thank you for pointing out this potential area of confusion for readers. I have excluded the statement that highlighted the difference between Somali and non-Somali women to just focus on the difference in our Somali cohort compared to those that have been previously reported and combined into one sentence for clarity.

10. Line 272-275: Seems here that you are suggesting that a major influence on use of contraceptive would be exposure to non-Somali women and adoption of their behaviors in this area. While I suppose that could be, but to this reader, it seems like things like habit, longer time to gather prior experiences including cultural norms might also contribute. Again, don't feel obliged to change anything, just my musings.

Response: This is an interesting point that I agree makes sense as a potential contributing factor. I have added a statement to reflect this possibility.

11. Table 2: Should include a column of crude ORs to contrast with the aORs. The CIs could be included in the same column as the OR and p-values could be omitted, since CIs are provided to show which comparisons were statistically significant. If p-values are desired, they could be indicated by footnotes to the Table, since they were only of two types: NS or $p < .001$.

Response: Table has been updated appropriately. As crude ORs are also being shown as part of initial univariate analysis, title was slightly changed to reflect this information.

Thank you so much for your continued assistance with this process!

Best,
Adela Cope, MD

From: Randi Zung [<mailto:RZung@greenjournal.org>]
Sent: Monday, December 17, 2018 2:25 PM
To: Cope, Adela G., M.D.
Subject: [EXTERNAL] Your Revised Manuscript 18-1817R1

Dear Dr. Cope:

Your revised manuscript is being reviewed by the Editors. Before a final decision can be made, we need you to address the following queries. Please make the requested changes to the latest version of your manuscript that is attached to this email. **Please track your changes and leave the ones made by the Editorial Office.** Please also note your responses to the author queries in your email message back to me.

1. General: The Editor has made edits to the manuscript using track changes. Please review them to make sure they are correct.

[Please note that comments that appear in my name are actually from Dr. Chescheir.]

2. Title: Note edits to title.

3. Abstract-Objective: The objective for the abstract should be a simple "to" statement without background. Please note the edits to this sentence.

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All data that is added to the abstract must also appear in the body text for consistency. Please make sure the numbers you add here are also added elsewhere in the manuscript.

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To facilitate the review process, we would appreciate receiving a response within 48 hours.

Best,
Randi Zung

— —
Randi Zung (Ms.)
Editorial Administrator | *Obstetrics & Gynecology*
American College of Obstetricians and Gynecologists
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<http://www.greenjournal.org>

From: [REDACTED]
To: [Stephanie Casway](mailto:Stephanie.Casway@greenjournal.org)
Subject: RE: O&G Figure Revision: 18-1817
Date: Wednesday, December 19, 2018 9:54:28 AM

In Figure 2, the Non-LARC hormonal contraception rate was 42.4% instead of 42.2%. Otherwise Agree with all changes and see no other errors.

Thank you!

Adela Cope, MD

From: Stephanie Casway [mailto:SCasway@greenjournal.org]
Sent: Wednesday, December 19, 2018 7:57 AM
To: Cope, Adela G., M.D.
Subject: [EXTERNAL] O&G Figure Revision: 18-1817

Good Morning Dr. Cope,

Your figures and legend have been edited, and PDFs of the figures and legend are attached for your review. Please review the figures CAREFULLY for any mistakes.

PLEASE NOTE: Any changes to the figures must be made now. Changes at later stages are expensive and time-consuming and may result in the delay of your article's publication.

To avoid a delay, I would be grateful to receive a reply no later than Friday, 12/21. Thank you for your help.

Best wishes,

Stephanie Casway, MA
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