OBSTETRICS & GYNECOLOGY

NOTICE: This document contains comments from the reviewers and editors generated during peer review of the initial manuscript submission and sent to the author via email.

Questions about these materials may be directed to the *Obstetrics & Gynecology* editorial office: obgyn@greenjournal.org.

Date: Feb 06, 2020
To: "Emily DeFranco" [redacted]
From: "The Green Journal" em@greenjournal.org
Subject: Your Submission ONG-20-158

RE: Manuscript Number ONG-20-158

Impact of prior cesarean delivery on early term delivery and neonatal morbidity

Dear Dr. DeFranco:

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 Feb 27, 2020, we will assume you wish to withdraw the manuscript from further consideration.

REVIEWER COMMENTS:

Reviewer #1: The purpose of this manuscript is to "assess whether a history of prior cesarean delivery (PCD) is associated with an increased risk of late preterm or early term delivery compared to births among multiparous women without prior cesarean. Furthermore, we will investigate whether prior cesarean increases the risk of neonatal or maternal morbidity, after adjusting for coexisting risk factors." This was a retrospective, cohort study using birth certificate data at the NCHS between 2012 and 2016.

1. As their primary outcome was gestational age at delivery, how accurate is the "best obstetric estimate" on the birth certificate at determining gestational age at delivery? How valid are the other variables (cesarean delivery, BMI, growth restriction, etc) recorded on the birth certificate?

2. Could the authors expand on composite outcome of neonatal morbidity? Was each variable within the composite outcome awarded a numeric value and the composite outcome given numeric value? Or was it a yes/no variable? If the neonate had 5 minute apgar of<7 then the neonate was considered + for adverse composite neonatal outcome or did they require more than one variable to be positive to be considered an adverse composite neonatal outcome? Could they also similarly expand on their discussion of composite maternal morbidity?

3. Who collected the data from the birth certificate? Was the data recorded on a piloted form? Was the data transferred to an electronic database? What was done to ensure accuracy of data recording and transfer to the database? The authors note one of the limitations was missing data, what did they do when there was missing data?

4. In line 135. "diabetes". In table 1 they noted pre-gestational diabetes. Would the authors consider changing line 135 to pre-Gestational DM or did they include pre-gestational DM and gestational DM in their analysis? Please clarify.

Reviewer #2: This is a well conducted study and the design is appropriate for the research question at hand. One of the key strengths of this study is the large number of included subjects, which results in rather precise confidence intervals in the results. Another strength is the apparent dose-dependent association between number of prior Cesarean sections and gestational age prior at 37 weeks and earlier demonstrated by this study. However, there are several important issues that must be addressed to make this study more rigorous and the interpretation of findings more convincing.

Major revisions:

1) The Discussion section needs to be made more concise and to the point. The Discussion should follow this general format: 1. summary of a key finding; 2. comparison to relevant findings in existing literature; 3. discussion of why you think you found your outcome, while referencing evidence from literature or your own study. Ideally, the discussion is divided into several smaller paragraphs with each paragraph dedicated to a different key finding of your study. Your discussion as is is especially lacking in #2 and #3, and I find many of your citations to lack a clear connection to your findings. I want to see more exploration of the literature (including a biomedical basis, if possible) that explains why a history of c/s can lead to preterm delivery in a subsequent pregnancy.

2) You did not clearly state whether you only included c/s deliveries for the current pregnancy and excluded all vaginal deliveries, although this was implied in line 80. If this is the case, please provide a justification for excluding vaginal deliveries. Including versus excluding vaginal deliveries in your study would tell very different stories and could lead to distinct biomedical explanations for your findings. In particular, there is limited evidence for women with >2 c/s to safely have a TOLAC (ACOG Practice Bulletin 205), and providers may default to scheduling these women for c/s in the late preterm/early term period. Additionally, women who have had more c/s and are older (and your data shows these two groups overlap significantly) may be more likely to have a prior classical cesarean, and c/s at 36-37 weeks is indicated by standard of practice. Is it possible your findings largely reflect these practices for repeat c/s, rather than medical indications for delivery (regardless of mode) in the late preterm/early term period? (This of course would not explain the differences for 35 weeks gestation) Your findings would be more convincing if you also were to include vaginal deliveries.

Minor revisions:

3) At 39 weeks GA, women with prior c/s deliveries are also more likely than women without prior c/s to deliver. Although this is likely related to a practice of delivering before 40 weeks GA and not from the same underlying mechanism as the deliveries at 35-37 weeks GA, this is still worth acknowledging.

4) Table 1 suggests that women with PCD are significantly more likely to use cigarettes, but smoking status was not adjusted as a confounding variable in your analysis. Although your rationalized to NOT include smoking status because it was not significant in "the final model," I recommend to still adjust for smoking status for several reasons. Tobacco use is a known risk factor for preterm delivery, which is your primary outcome. Confounders should be selected a priori based on theory rather than modeled outcomes. Alternatively, you can provide a more detailed description of your "final model" (what type of modeling did you conduct?) and include it as a table or a supplement, to better allow the reader to assess the validity of this model.

5) line 131-132 and Table 1: I'm not convinced that Hispanic mothers were more likely to have PCD than non-Hispanic mothers, because these two subgroups make up similar percentages of the overall study population. Instead, I see a large difference in the proportion of "other" racial category, which might be a bigger driver of your P value. This P value reflects an overall difference in the proportions of all racial subgroups but is not specific to each racial subgroup. You would have to divide the racial categories into Hispanic vs non-Hispanic in order to measure differences between those subgroups.

6) line 171-172: the patients in your cohort did in fact have risk factors for preterm delivery besides PCD, but you had controlled for them (history of diabetes, hypertension, increased BMI). This is different from your current wording, which implies your cohort did not have any risk factors for preterm delivery.

7) line 177-78: I don't see anywhere in your study where you actually answer "Why" each additional PCD increases the likelihood of earlier delivery. Your study simply found an association between these two factors, but you did not provide any theoretical suggestions nor data as explanation for the mechanism behind this association. I would welcome this, as I mentioned in above in Revision #1, through expanding and improving the Discussion.

Reviewer #3: Impact of Prior Cesarean Delivery on Early Term Delivery and Neonatal Morbidity

1. One possible explanation for the finding of increased neonatal morbidity associated with prior cesarean delivery (Table 3) is that the adverse outcomes are significantly associated with attempted VBAC (labor) and/or uterine rupture. Would the results be different if adjusted for labor being present at the time of cesarean?

2. In Table 2, I wonder whether there should be greater analysis and discussion of the comparison between those women with one prior cesarean (representing the largest number of women with a prior cesarean) and the referent group. For example, 11.0 percent of women with one prior cesarean delivery delivered preterm at 35, 36, or 37 weeks compared with 10.8 percent of controls. Although likely statistically significant due to the huge sample size, the magnitude of risk between the two groups is small.

3. Were women with diabetes included in the study population? (It is a birth certificate field.) If yes, given that women with diabetes are more likely to deliver preterm and by cesarean, is this a potential confounder?

4. The overall hysterectomy rate (2080 out of 7.8 million births or 1 in 3776 deliveries) seems low. If so, perhaps greater discussion about birth certificate accuracy/ascertainment bias should be included.

STATISTICAL EDITOR COMMENTS:

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

Table 1: Much of the analysis does not compare pts without PCD vs pts with ≥ 1 PCD as a binary variable, but rather comparing vs 1, 2,3 or ≥ 4 PCD. I suspect that those groups may differ from one another, perhaps just as much as the comparison shown in Table 1. Should also provide a Table of baseline maternal factors for each subset of PCD.

Tables 2, 3, 4: Should supplement the adjustment model with propensity score matching to corroborate that the associations shown also hold when the baseline factors are matched. This is especially important if the expansion of Table 1 shows significant changes in baseline maternal factors with increasing PCD, since in that case, each PCD cohort would require a separate matched group among the non-PCD.

Table 3, 4: Also, although the samples are large, the counts for seizures or neurologic dysfunction are more modest, esp. among 2, 3 or 4 PCD, as are the counts for uterine rupture among those with 3 or ≥ 4 PCD. Likely those aRRs are over fitted.

EDITOR'S COMMENTS:

We no longer require that authors adhere to the Green Journal format with the first submission of their papers. However, any revisions must do so. I strongly encourage you to read the instructions for authors (the general bits as well as those specific to the feature-type you are submitting). The instructions provide guidance regarding formatting, word and reference limits, authorship issues, and other things. Adherence to these requirements with your revision will avoid delays during the revision process, as well as avoid re-revisions on your part in order to comply with the formatting. For instance "PCD" is not an acceptable abbreviation and should be spelled out throughout the paper.

Line 1: It is an idiosyncratic fact that at the Journal we tend to avoid the use of the word impact to imply the result of a change, preferring to limit "impact" to mean a physical blow.

Line 38: do you mean "multiparous" (ie, > 1 prior births) or "parous"—any number of prior births?

Line 54: what about promoting TOLAC as well?

Line 97: Terminology question here. "Small for gestational age" is the term typically used for birthweight < 10th percentile and "Fetal Growth Restriction" for EFW or AC< 10th percentile. It seems you mean SGA here? Would you consider changing term used?

Line 99: How did you handle women w/o prepregnancy weight? Was this just missing data or do you allow for first prenatal weight measured?

Line 104: I'm assuming, but would like you to articulate, that you cannot ID whether any prior CD were classical incisions, which would for some be in an indication for late preterm or early term birth. Might also be an indication for NOT attempting TOLAC in 1st birth after original CS.

Line 125: P Values vs Effect Size and Confidence Intervals
While P values are a central part of inference testing in statistics, when cited alone, often the strength of the conclusion can be misunderstood. Whenever possible, the preferred citation should be in terms of an effect size, such as odds ratio or relative risk or the mean difference of a variable between two groups, expressed with appropriate confidence intervals. When such syntax is used, the P value has only secondary importance and often can be omitted or noted as footnotes in a Table format. Putting the results in the form of an effect size makes the result of the statistical test more clinically relevant and gives better context than citing P values alone.
This is true for the abstract as well as the manuscript, tables and figures.

Please provide absolute values for variables, in addition to assessment of statistical significance.

One reviewer made explicit comments about your introduction. As you address these, please note that your introduction

should be about 1 page in length.

EDITOR COMMENTS:

1. 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. 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:
A. OPT-IN: Yes, please publish my point-by-point response letter.
B. OPT-OUT: No, please do not publish my point-by-point response letter.

2. As of December 17, 2018, Obstetrics & Gynecology has implemented an "electronic Copyright Transfer Agreement" (eCTA) and will no longer be collecting author agreement forms. When you are ready to revise your manuscript, you will be prompted in Editorial Manager (EM) to click on "Revise Submission." Doing so will launch the resubmission process, and you will be walked through the various questions that comprise the eCTA. Each of your coauthors will receive an email from the system requesting that they review and electronically sign the eCTA.

Please check with your coauthors to confirm that the disclosures listed in their eCTA forms are correctly disclosed on the manuscript's title page.

3. Was this presented at SMFM in 2020 or 2019? It appears to be 2020 from the SMFM abstract book, but your title page lists 2019.

4. Please submit a completed STROBE checklist.

Responsible reporting of research studies, which includes a complete, transparent, accurate and timely account of what was done and what was found during a research study, is an integral part of good research and publication practice and not an optional extra. Obstetrics & Gynecology supports initiatives aimed at improving the reporting of health research, and we ask authors to follow specific guidelines for reporting randomized controlled trials (ie, CONSORT), observational studies (ie, STROBE), meta-analyses and systematic reviews of randomized controlled trials (ie, PRISMA), harms in systematic reviews (ie, PRISMA for harms), studies of diagnostic accuracy (ie, STARD), meta-analyses and systematic reviews of observational studies (ie, MOOSE), economic evaluations of health interventions (ie, CHEERS), quality improvement in health care studies (ie, SQUIRE 2.0), and studies reporting results of Internet e-surveys (CHERRIES). Include the appropriate checklist for your manuscript type upon submission. Please write or insert the page numbers where each item appears in the margin of the checklist. Further information and links to the checklists are available at http://ong.editorialmanager.com. In your cover letter, be sure to indicate that you have followed the CONSORT, MOOSE, PRISMA, PRISMA for harms, STARD, STROBE, CHEERS, SQUIRE 2.0, or CHERRIES guidelines, as appropriate.

5. 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 has adopted the use of the reVITALize definitions. Please access the obstetric and gynecology data definitions at https://www.acog.org/About-ACOG/ACOG-Departments/Patient-Safety-and-Quality-Improvement/reVITALize. If use of the reVITALize definitions is problematic, please discuss this in your point-by-point response to this letter.

6. 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 print appendixes) but exclude references.

7. Titles in Obstetrics & Gynecology are limited to 100 characters (including spaces). Do not structure the title as a declarative statement or a question. Introductory phrases such as "A study of..." or "Comprehensive investigations into..." or "A discussion of..." should be avoided in titles. Abbreviations, jargon, trade names, formulas, and obsolete terminology also should not be used in the title. Titles should include "A Randomized Controlled Trial," "A Meta-Analysis," or "A Systematic Review," as appropriate, in a subtitle. Otherwise, do not specify the type of manuscript in the title.

Please avoid using "impact" in the title and manuscript. You could use "Association" instead.

8. Specific rules govern the use of acknowledgments in the journal. Please note the following guidelines:

* All financial support of the study must be acknowledged.
* Any and all manuscript preparation assistance, including but not limited to topic development, data collection, analysis,

writing, or editorial assistance, must be disclosed in the acknowledgments. Such acknowledgments must identify the entities that provided and paid for this assistance, whether directly or indirectly.
* All persons who contributed to the work reported in the manuscript, but not sufficiently to be authors, must be acknowledged. Written permission must be obtained from all individuals named in the acknowledgments, as readers may infer their endorsement of the data and conclusions. Please note that your response in the journal's electronic author form verifies that permission has been obtained from all named persons.
* If all or part of the paper was presented at the Annual Clinical and Scientific Meeting of the American College of Obstetricians and Gynecologists or at any other organizational meeting, that presentation should be noted (include the exact dates and location of the meeting).

9. Provide a short title of no more than 45 characters, including spaces, for use as a running foot.

10. 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.

11. 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.

12. 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.

13. In your Abstract, manuscript Results sections, and tables, the preferred citation should be in terms of an effect size, such as odds ratio or relative risk or the mean difference of a variable between two groups, expressed with appropriate confidence intervals. When such syntax is used, the P value has only secondary importance and often can be omitted or noted as footnotes in a Table format. Putting the results in the form of an effect size makes the result of the statistical test more clinically relevant and gives better context than citing P values alone.

If appropriate, please include number needed to treat for benefits (NNTb) or harm (NNTh). When comparing two procedures, please express the outcome of the comparison in U.S. dollar amounts.

Please standardize the presentation of your data throughout the manuscript submission. For P values, do not exceed three decimal places (for example, "P = .001"). For percentages, do not exceed one decimal place (for example, 11.1%").

14. 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.

15. Figure 1 may be resubmitted with the manuscript as-is.

16. Authors whose manuscripts have been accepted for publication have the option to pay an article processing charge and publish open access. With this choice, articles are made freely available online immediately upon publication. An information sheet is available at http://links.lww.com/LWW-ES/A48. The cost for publishing an article as open access can be found at http://edmgr.ovid.com/acd/accounts/ifauth.htm.

Please note that if your article is accepted, you will receive an email from the editorial office asking you to choose a publication route (traditional or open access). Please keep an eye out for that future email and be sure to respond to it promptly.

17. If you choose to revise your manuscript, please submit your revision through Editorial Manager at http://ong.editorialmanager.com. Your manuscript should be uploaded in a word processing format such as Microsoft Word. Your revision's cover letter should include the following:
    * A confirmation that you have read the Instructions for Authors (http://edmgr.ovid.com/ong/accounts/authors.pdf), and
    * A point-by-point response to each of the received comments in this letter.

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

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 Feb 27, 2020, we will assume you wish to withdraw the manuscript from further consideration.

Sincerely,

Nancy C. Chescheir, MD
Editor-in-Chief

2018 IMPACT FACTOR: 4.965
2018 IMPACT FACTOR RANKING: 7th out of 83 ob/gyn journals
