OBSTETRICS & GYNECOLOGY

NOTICE: This document contains correspondence generated during peer review and subsequent revisions but before transmittal to production for composition and copyediting:

- Comments from the reviewers and editors (email to author requesting revisions)
- Response from the author (cover letter submitted with revised manuscript)*

**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: Aug 13, 2020
To: "Ilir Hoxha" [redacted]
From: "The Green Journal" em@greenjournal.org
Subject: Your Submission ONG-20-1897

RE: Manuscript Number ONG-20-1897

Cesarean Section and Gender of Delivering Physicians: Systematic Review and Meta-analysis

Dear Dr. Hoxha:

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).

Due to the COVID-19 pandemic, your paper will be maintained in active status for 30 days from the date of this letter. If we have not heard from you by Sep 12, 2020, we will assume you wish to withdraw the manuscript from further consideration.

REVIEWER COMMENTS:

Reviewer #1:

This is a meta-analysis and systematic review evaluating the impact of gender of delivering physician on the odds of performing a cesarean section as well as preferences regarding elective cesarean section in order to better understand how physician gender influences outcomes. The authors included 15 studies evaluating the likelihood for performing a cesarean section and 11 studies regarding the preference for mode of delivery. The time frame of studies ranged from 1992-2018. The authors used PRISMA guidelines for meta-analyses.

1. Abstract: The objective is clearly stated and is representative of the manuscript. Add the Prospero registration here as well.

2. Introduction: The background is thorough and adequate. Overall the purpose of the manuscript is clear. However, I would recommend briefly elaborating on the goal of trying to elucidate how and why physician gender influences outcomes (lines 72-75) as this is a major portion of the discussion.

3. Materials and Methods: The methods appear suitable with good explanation of choice of methods and analysis. Line 113, include a brief sentence regarding the Robson model to describe the numbers used in Table 1 and supplemental figure (subgroup MA patients).

4. Results: The results are well stated with inclusion of assessment of bias and heterogeneity. I would recommend additional explanation on the subgroup analysis as well as its impact in the data analysis.

5. Discussion: Appropriate evaluation of strengths and limitations of the study and the conclusions are well supported by the data. Line 239-242, recommend addressing how these findings can be further utilized to impact patient care and the global cesarean section rate.

6. Figures/tables: The figures are grainy and difficult to read. Recommend including the supplemental figure (subgroup MA patients) in the main article.

7. References: The references seem appropriate but could likely be pared down significantly.

Reviewer #2:

1. This is an interesting meta-analysis, which attempts to address the fact whether there is a difference in cesarean section rate, performed by male versus female physicians, based on data from 14 countries. Most of these data were from Taiwan, US and Brazil, smallest sample being 451 and the largest 857920 patients. The study included the data over a period of 26 years.

2. Exclusion criteria varied, but they are not described in detail (line 151).

3. This study analyzes the data of decisions of 4786 physicians, however details of the level of their training, experience as well as the length of experience in the same Institute are not included. Obviously, it is a difficult task to obtain such information as these data were not included in the original publications, collected retrospectively.

4. Nor are the institutional guidelines, medico- legal atmosphere, administration policy, malpractice liabilities issue in US, and an overall caesarean section at the Institute. In the absence of all these deficits it is difficult to judge the findings without considering effects of these variables.

5. Race, ethnicity, education, socioeconomic status, prior experiences of physicians as well as patients and their families also play a role, which is sometimes difficult to put in the equation.

6. Authors have vividly described the reasons, as to why there is a lower incidence of c section in patients, managed by female physicians, which is commendable. however those who are in active practice face a no.of issues in recent years and have to make some decisions which may not be their decision, but unfortunately, institutions' legal department in US.

7. Has there been any changes in overall c sections since there are more female obstetricians in the work force?

8. Future studies that the authors described in conclusion would help.

9.Authors have not addressed or unable to address distribution of patient population characteristics and over all c section rate, which is very important.

Reviewer #3:

I would like to congratulate the authors on the hard work that was clearly required to create this manuscript.

I found the abstract did a good job of summarizing the objectives, methods, results and conclusions. I would encourage the authors to include a bit of background in the abstract, as well as the systemic review registration number, to be in compliance with PRISMA guidelines.

I thought the introduction did well to outline the importance of cesarean rate with respect to women's and infant health. However, I was surprised to see the authors state as a matter of fact that physician gender is known to influence cesarean rates (lines 67-68) citing what appears to be a book chapter written by this study's primary author (#37). Perhaps a qualifying statement for that particular statement like 'may be' would be more appropriate because the stated objective of this manuscript is to determine "whether [or not] there is a relationship...."

I found the methods section was detailed, satisfying both my criteria and those of the PRISMA checklist, with the possible exception of specificity in regards to bias-- The PRISMA checklist encourages authors to evaluate bias within individual studies and across studies and it wasn't clear where the authors were referring to each.

Similarly the results section was methodical and complete with the exception of clarity around their treatment of bias either individual or across studies.

Within the discussion section the authors started with an appropriate conclusion based on the evidence in the study with a balanced look at limitations and potential areas of bias. I think trying to unravel the causes for the results seen in the study presents a significant challenge and these assertions felt like they had less evidence behind them. Especially the multiple uses of citation #37-- if one citation is being used to justify numerous unrelated points, it makes one wonder how strong that citation's evidence can be for each point (admittedly I was unable to access this citation to confirm these suspicions, so I apologize for the assumption, but assuming the book chapter referenced cites peer reviewed evidence, so why not just cite those studies directly?). Overall I think the discussion could be improved with a significant reduction in the conjecture about why the gender differences were found. It would make the strong last few paragraphs regarding future implications carry more weight. I appreciated seeing the appropriate disclosures regarding the lack of outside

funding.

STATISTICAL EDITOR COMMENTS:

Figs 2, 3: Should include in the figures the weights given to each study and the actual counts for each subset being compared in each row entry, with a aggregated enumeration of all counts in the final row for overall.

lines 172-175, 177-178 and elsewhere in text: The studies allow for calculation of odds ratios, not relative risks, so the analyses and adjusted analyses do not conclude that female physicians were 0.58x as likely to comply with CS request, but rather that the odds was
0.58.

lines 170-171: Rather than showing no heterogeneity, the statistic demonstrates low heterogeneity. Different studies would always have some heterogeneity.

It is unclear what variables were included in the adjusted analyses, but another potential explanation for differences in odds of complying with or performing CS might be the age of the provider. Was that variable included in the adjustment analysis? That is, more recent decades changed the demographics of OB physician providers to include more women, so the average age and time of professional training might be different for women vs men providers.

EDITORIAL OFFICE 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. Obstetrics & Gynecology uses an "electronic Copyright Transfer Agreement" (eCTA). 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. If you used an administrative database, in order for an administrative database study to be considered for publication in Obstetrics & Gynecology, the database used must be shown to be reliable and validated. In your response, please tell us who entered the data and how the accuracy of the database was validated. This same information should be included in the Materials and Methods section of the manuscript.

4. All studies should follow the principles set forth in the Helsinki Declaration of 1975, as revised in 2013, and manuscripts should be approved by the necessary authority before submission. Applicable original research studies should be reviewed by an institutional review board (IRB) or ethics committee. This review should be documented in your cover letter as well in the Methods section of the body text, with an explanation if the study was considered exempt. If your research is based on a publicly available data set approved by your IRB for exemption, please provide documentation of this in your cover letter by submitting the URL of the IRB website outlining the exempt data sets or a letter from a representative of the IRB. In addition, insert a sentence in the Methods section stating that the study was approved or exempt from approval. In all cases, the complete name of the IRB should be provided in the manuscript.

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 data definitions at https://www.acog.org/practice-management/health-it-and-clinical-informatics/revitalize-obstetrics-data-definitions and the gynecology data definitions at https://www.acog.org/practice-management/health-it-and-clinical-

informatics/revitalize-gynecology-data-definitions. 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: Review articles should not exceed 25 typed, double-spaced pages (6,250 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. 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).

8. 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 limit for Reviews is 300 words. Please provide a word count.

9. 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.

10. 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.

11. 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%").

12. Your manuscript contains a priority claim. 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 it is not based on a systematic search but only on your level of awareness, it is not a claim we permit.

13. 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.

14. When you submit your revision, art saved in a digital format should accompany it. If your figure was created in

Microsoft Word, Microsoft Excel, or Microsoft PowerPoint formats, please submit your original source file. Image files should not be copied and pasted into Microsoft Word or Microsoft PowerPoint.

When you submit your revision, art saved in a digital format should accompany it. Please upload each figure as a separate file to Editorial Manager (do not embed the figure in your manuscript file).

If the figures were created using a statistical program (eg, STATA, SPSS, SAS), please submit PDF or EPS files generated directly from the statistical program.

Figures should be saved as high-resolution TIFF files. The minimum requirements for resolution are 300 dpi for color or black and white photographs, and 600 dpi for images containing a photograph with text labeling or thin lines.

Art that is low resolution, digitized, adapted from slides, or downloaded from the Internet may not reproduce.

15. Each supplemental file in your manuscript should be named an "Appendix," numbered, and ordered in the way they are first cited in the text. Do not order and number supplemental tables, figures, and text separately. References cited in appendixes should be added to a separate References list in the appendixes file.

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 https://wkauthorservices.editage.com/open-access/hybrid.html.

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.

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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 30 days from the date of this letter. If we have not heard from you by Sep 12, 2020, we will assume you wish to withdraw the manuscript from further consideration..

Sincerely,

Dwight J. Rouse, MD
Associate Editor, Obstetrics

2019 IMPACT FACTOR: 5.524
2019 IMPACT FACTOR RANKING: 6th out of 82 ob/gyn journals

_____

Nancy Chescheir, MD
Editor in Chief
Obstetrics and Gynecology
Obstetrics and Gynecology Editorial Office
Chapel Hill, NC

Dear Dr. Chescheir,

Cesarean Section and Gender of Delivering Physicians: Systematic Review and Meta-analysis

Please find enclosed the revised manuscript for consideration in Obstetrics and Gynecology.

We have now applied in the manuscript all the recommendations of the reviewers and editorial office, in addition to responding to their questions. The responses to all comments and suggestions are presented below.

Thank you for considering our work.
Sincerely,

Ilir Hoxha MD, MS, PhD
Assistant Clinical Professor
Department of Community and Family Medicine, Geisel School of Medicine at Dartmouth
[redacted]

Responses to Reviewer Comments

First of all, many thanks for all the comments and suggestions. We find all these highly valuable as we reviewed and produced a new draft of the manuscript.

Reviewer #1:
This is a meta-analysis and systematic review evaluating the impact of gender of delivering physician on the odds of performing a cesarean section as well as preferences regarding elective cesarean section in order to better understand how physician gender influences outcomes. The authors included 15 studies evaluating the likelihood for performing a cesarean section and 11 studies regarding the preference for mode of delivery. The time frame of studies ranged from 1992-2018. The authors used PRISMA guidelines for meta-analyses.

Response: Thank you for your comment.

1. Abstract: The objective is clearly stated and is representative of the manuscript. Add the Prospero registration here as well.

Response: As suggested, we have added the Prospero registration number (CRD42020158442) at the bottom of abstract. (line 51)

2. Introduction: The background is thorough and adequate. Overall the purpose of the manuscript is clear. However, I would recommend briefly elaborating on the goal of trying to elucidate how and why physician gender influences outcomes (lines 72-75) as this is a major portion of the discussion.

Response: We have addressed this last point in the manuscript. (lines 77-84 and lines 88-89).

3. Materials and Methods: The methods appear suitable with good explanation of choice of methods and analysis. Line 113, include a brief sentence regarding the Robson model to describe the numbers used in Table 1 and supplemental figure (subgroup MA patients).

Response: We have added the information on the Robson groups in the online appendix. More specifically we have added: 1. A section "Population by Robson criteria" which using a standard presentation of all criteria used in Robson system outlines in detail the composition of study population according such criteria for each study; 2. A section with Robson groups that we have estimated that are included in population of each study using criteria in section 1; 3. Lastly we added a new classification of Robson groups that we also use in subgroup analysis for patient data (now Figure 4). The studies were so diverse in Robson groups inclusion, so we felt that only "All' and "Multiple" categorizations made sense.

The reason that we created a new classification is due to fact that we have found a error in excel code that enabled us to create this groups automatically from Robson criteria but didn't register some of the upper (numbered) Robson groups. Hence, we have redone all that part and also checked it manually to make sure everything is correct. We tried to remain loyal to the way data are reported by the studies. For example, some studies reported that they have excluded breach presentation but have not specified if they have excluded transverse presentation. We remained consistent and reported data as they were reported in original papers.

As this is not best use of Robson groups as in the initial subgroup analysis, in the new subgroup analysis (Figure 4) we have added all available Robson criteria as new subgroups and analysed them. This meant that except existing two criteria that we were included in initial sub-group analysis (parity and inclusion of previous CS) we have added all other feasible Robson criteria (i.e. including number of foetuses, age of gestation, onset of labour).

As suggested, we have summarized these actions in methods section (lines 123-127).

4. Results: The results are well stated with inclusion of assessment of bias and heterogeneity. I would recommend additional explanation on the subgroup analysis as well as its impact in the data analysis.

Response: We agree with recommendation. We have added additional explanations from our subgroup analyses to the results (lines 198-225) and discussion (lines 254-298) sections.

5. Discussion: Appropriate evaluation of strengths and limitations of the study and the conclusions are well supported by the data. Line 239-242, recommend addressing how these findings can be further utilized to impact patient care and the global caesarean section rate.

Response: Thank you for your comment.

6. Figures/tables: The figures are grainy and difficult to read. Recommend including the supplemental figure (subgroup MA patients) in the main article.

Response: The figures are grainy due to submission system, a standard for most submission systems. Otherwise we have submitted high quality and high-resolution figures.

We have created to Figure 4 out of "Subgroup MA patients" sheet which was originally in Online Appendix.

7. References: The references seem appropriate but could likely be pared down significantly.

Response: We removed 12 references which could be omitted without altering the discussion content. We had to add very few to address other comments by reviewers.

Reviewer #2:

1. This is an interesting meta-analysis, which attempts to address the fact whether there is a difference in cesarean section rate, performed by male versus female physicians, based on data from 14 countries. Most of these data were from Taiwan, US and Brazil, smallest sample being 451 and the largest 857920 patients. The study included the data over a period of 26 years.

Response: Thank you for your comment.

2. Exclusion criteria varied, but they are not described in detail (line 151).

Response: We have addressed this omission by adding all information on exclusion criteria for both groups of studies (i.e. studies looking CS rates by gender of delivering physician and studies looking at preference for CS by gender of delivering physician) which has already been extracted. We have also checked one more the papers for such information. All such information is available now in the Online Appendix. While for first group of studies we have now included extensive detail on exclusion criteria, for physician preference studies there were not much reported exclusion criteria.

We have also referred the reader to look up this information within Online Appendix and we have specified this in the manuscript (line 169-170).

3. This study analyzes the data of decisions of 4786 physicians, however details of the level of their training, experience as well as the length of experience in the same Institute are not included. Obviously, it is a difficult task to obtain such information as these data were not included in the original publications, collected retrospectively.

Response: Correct. We didn't have much information for preference studies, hence, we have discussed this limitation in the discussion section of manuscript (lines 243-245).

4. Nor are the institutional guidelines, medico- legal atmosphere, administration policy, malpractice liabilities issue in US, and an overall caesarean section at the Institute. In the absence of all these deficits it is difficult to judge the findings without considering effects of these variables.

Response: Correct. We didn't have much information for preference studies, hence, we have discussed this limitation in the discussion section of manuscript (lines 243-245).

5. Race, ethnicity, education, socioeconomic status, prior experiences of physicians as well as patients and their families also play a role, which is sometimes difficult to put in the equation.

Response: Correct. We didn't have much information for preference studies, hence, we have discussed this limitation in the discussion section of manuscript (lines 243-245).

6. Authors have vividly described the reasons, as to why there is a lower incidence of c section in patients, managed by female physicians, which is commendable. however those who are in active practice face a no. of issues in recent years and have to make some decisions which may not be their decision, but unfortunately, institutions' legal department in US.

Response: I fully understand this comment and am aware of medical litigation effect on CS rates. Hence, we have highlighted in the manuscript "Male physicians may also be more risk averse in comparison with their female counterparts which can link to the issue of fear from medical litigation." (lines 281-283)

7. Has there been any changes in overall c sections since there are more female obstetricians in the work force?

Response: The results of period of data collection subgroup analysis shows some time effect in odds for caesarean section among male and female physicians. We have presented such information in results section subgroup analysis (line 201-204) and we discuss it in discussion section (lines 292-298).

8. Future studies that the authors described in conclusion would help.

Response: Thank you for your comment.

9.Authors have not addressed or unable to address distribution of patient population characteristics and over all c section rate, which is very important.

Response: To extent available, we have now included all patient population characteristics in the Online Appendix (see Robson criteria, Robson groups and Robson classification information as well as exclusion criteria).

We have also used such information in redoing subgroup analysis (Figure 4) as well as reflected such results in the results section of manuscript (lines 198-218).

Reviewer #3:

I would like to congratulate the authors on the hard work that was clearly required to create this manuscript.

Response: Many thanks you for your comment.

I found the abstract did a good job of summarizing the objectives, methods, results and conclusions. I would encourage the authors to include a bit of background in the abstract, as well as the systemic review registration number, to be in compliance with PRISMA guidelines.

Response: We have added some background (lines 25-27) and the PROSPERO registration number (lines 51, 90-92) for our review.

I thought the introduction did well to outline the importance of cesarean rate with respect to women's and infant health. However, I was surprised to see the authors state as a matter of fact that physician gender is known to influence cesarean rates (lines 67-68) citing what appears to be a book chapter written by this study's primary author (#37). Perhaps a qualifying statement for that particular statement like 'may be' would be more appropriate because the stated objective of this manuscript is to determine "whether [or not] there is a relationship...."

Response: We agree with your comment. We have corrected this omission. (line 72-73)

I found the methods section was detailed, satisfying both my criteria and those of the PRISMA checklist, with the possible exception of specificity in regards to bias-- The PRISMA checklist encourages authors to evaluate bias within individual studies and across studies and it wasn't clear where the authors were referring to each.
Similarly the results section was methodical and complete with the exception of clarity around their treatment of bias either individual or across studies.

Response: In submitted draft, we have already outlined the method of assessing risk of bias (using QUIPS) in line 128-132. The results of this assessment were presented in the Online Appendix and summarized in results section. (lines 174-182)

Thank you for bringing to attention bias across studies. We have addressed it now for adjusted estimates meta-analysis in studies looking at the effect of gender of delivering physician. We have examined small study effect using Egger and Beg tests. We didn't perform such test for preference studies, as such tests should be used only when there are at least 10 studies included in the meta-analysis. In fewer studies the power of the tests is too low to distinguish chance from real asymmetry. (See: http://handbook.cochrane.org/chapter_10/10_4_3_1_recommendations_on_testing_for_funnel_plot_asymmetry.htm)

Within the discussion section the authors started with an appropriate conclusion based on the evidence in the study with a balanced look at limitations and potential areas of bias. I think trying to unravel the causes for the results seen in the study presents a significant challenge and these assertions felt like they had less evidence behind them. Especially the multiple uses of citation #37-- if one citation is being used to justify numerous unrelated points, it makes one wonder how strong that citation's evidence can be for each point (admittedly I was unable to access this citation to confirm these suspicions, so I apologize for the assumption, but assuming the book chapter referenced cites peer reviewed evidence, so why not just cite those studies directly?). Overall I think the discussion could be improved with a significant reduction in the conjecture about why the gender differences were found. It would make the strong last few paragraphs regarding future implications carry more weight. I appreciated seeing the appropriate disclosures regarding the lack of outside funding.

Response: This is a very useful comment. It makes out discussion way more focused and integrated. We agree almost completely with this comment. We have removed citation #37, now #29, and replaced it with studies quoted in reference #29. We find extremely useful also suggestion for reduction/reformulation of parts of discussion section but we hesitated to remove completely the part "why gender differences were found" as it contains important information for future implications and research which was also recognized by other reviewers. Hence, we have tried to integrate such information better in the context you suggest (implications) as well as limitations of the study and interpretation of main and subgroup analysis, rather than making them sound like explanations of results only. (lines 254-298)

STATISTICAL EDITOR COMMENTS:
Figs 2, 3: Should include in the figures the weights given to each study and the actual counts for each subset being compared in each row entry, with a aggregated enumeration of all counts in the final row for overall.

Response: We have addressed this comment and added both weights and counts (and totals) in new figure 2 and 3.

During this process we have also made some very small corrections that have no substantial effect on results in order that count data are fully aligned with OR and 95%CI-s.

Please note that in Figure 2 in adjusted panel:
1. McClelland et al. 2017 Haberman et al. 2014 didn't provide count data.
2. For Tamim et al. 2007 we have corrected a typo in code that slightly affected 95CI. It was 0.51 0.80 it is now 0.53 – 0.77.

Please note that in Figure 2 in unadjusted panel:
1. We have made very small rounding corrections (table below) that were present due to inversion of rates and now we made via direct calculation without inversion of rates.
2. Mirabal Betran et al. 2019 reported lower odds OR when reporting OR statistic as compared to when we calculated with count data (table below). Since we use count data on the side of forest plot, we think that using OR from count data is more appropriate to ensure consistency of presented results (count data and OR together).

	Were			Are (only corrections)		
	OR	95%CI		OR	95%CI	
Hernandez-Martinez et al.	1.02	0.75	1.41		0.74	1.40
Luthy et al.	0.86	0.73	1.01	0.85	0.72	
Silveira et al.	1.42	0.80	2.52	1.39	0.78	2.47
Yee et al.	0.99	0.86	1.15			1.14
D'Orsi et al.	0.36	0.24	0.53			0.54
Liu total	0.80	0.76	0.84	0.79	0.72	0.87
Mirabal-Beltran et al.	0.50	0.39	0.64	0.40	0.31	0.51

Please note that in Figure 3 in unadjusted panel:
1. We have made very small rounding corrections (table below) that were present due to inversion of rates and now we made direct calculation without inversion of rates.

	Were			Are (only corrections)		
	OR	95%CI		OR	95%CI	
Lataifeh et al.	1.54	0.54	4.38			4.39
Groom et al.	1.27	0.65	2.47			2.48

lines 172-175, 177-178 and elsewhere in text: The studies allow for calculation of odds ratios, not relative risks, so the analyses and adjusted analyses do not conclude that female physicians were 0.58x as likely to comply with CS request, but rather that the odds was 0.58.

Response: We have adjusted our text accordingly.

lines 170-171: Rather than showing no heterogeneity, the statistic demonstrates low heterogeneity. Different studies would always have some heterogeneity.

Response: We have changed this to reflect the reviewer comment.

It is unclear what variables were included in the adjusted analyses, but another potential explanation for differences in odds of complying with or performing CS might be the age of the provider. Was that variable included in the adjustment analysis? That is, more recent decades changed the demographics of OB physician providers to include more women, so the average age and time of professional training might be different for women vs men providers. Obstetrician age may be a relevant factor in preference for cesarean birth, and the lack of such information in the studies is acknowledged as a study limitation (Lines 215-7).

Response: We agree with the comment. In Online Appendix we have now presented all information om adjusting variables and exclusion criteria we could extract from papers under review.

We have also addressed further in discussion the fact that physician demographics and other personal characteristics can play an important role in the differences we observe (line 245 and 292-298).

EDITORIAL OFFICE 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.

Response: Yes, please publish my point-by-point response letter.

2. Obstetrics & Gynecology uses an "electronic Copyright Transfer Agreement" (eCTA). 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.

Response: Thanks for this information. We will check with each author individually that they have done so.

3. If you used an administrative database, in order for an administrative database study to be considered for publication in Obstetrics & Gynecology, the database used must be shown to be reliable and validated. In your response, please tell us who entered the data and how the accuracy of the database was validated. This same information should be included in the Materials and Methods section of the manuscript.

Response: We have not used any database.

4. All studies should follow the principles set forth in the Helsinki Declaration of 1975, as revised in 2013, and manuscripts should be approved by the necessary authority before submission. Applicable original research studies should be reviewed by an institutional review board (IRB) or ethics committee. This review should be documented in your cover letter as well in the Methods section of the body text, with an explanation if the study was considered exempt. If your research is based on a publicly available data set approved by your IRB for exemption, please provide documentation of this in your cover letter by submitting the URL of the IRB website outlining the exempt data sets or a letter from a representative of the IRB. In addition, insert a sentence in the Methods section stating that the study was approved or exempt from approval. In all cases, the complete name of the IRB should be provided in the manuscript.

Response: We have added a statement to the manuscript stating that our review is exempt from ethics review at the end of the manuscript, the Methods section and the cover letter.

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 data definitions at https://www.acog.org/practice-management/health-it-and-clinical-informatics/revitalize-obstetrics-data-definitions and the gynecology data definitions at https://www.acog.org/practice-management/health-it-and-clinical-informatics/revitalize-gynecology-data-definitions. If use of the reVITALize definitions is problematic, please discuss this in your point-by-point response to this letter.

Response: We have checked these definitions and ensured the compliance of our manuscript.

6. Because of space limitations, it is important that your revised manuscript adhere to the following length restrictions by manuscript type: Review articles should not exceed 25 typed, double-spaced pages (6,250 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.

Response: We have checked the length of our manuscript, which is under both the page and word limits.

7. Specific rules govern the use of acknowledgments in the journal. Please note the following guidelines:
* All financial support of the study must be acknowledged.

Response: We have carried out this study within our normal academic duties and have not received additional funding for this study. This is acknowledged in the manuscript (lines 329-331)

* 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.

Response: These contributions have been acknowledged in the manuscript (321-322).

* 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.

Response: We have already had included acknowledgements for those who contributed to an extent which did not warrant authorship and clarified their role in helping with the study (lines 321-322), as well as obtaining approval from those listed in acknowledgements.

* 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).

Response: Our work has not yet been presented at any organizational meeting.

8. 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: We have checked our Abstract against data contained in the main text and ensured consistency.

In addition, the abstract length should follow journal guidelines. The word limit for Reviews is 300 words. Please provide a word count.

Response: In addition to adding Prospero Registration details and Background, we have removed some text to ensure our abstract fits within 300 words.

9. 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: We have checked our manuscript against the standard abbreviations given here.

10. 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: We have checked and adjusted the manuscript to remove this symbol.

11. 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.

Response: We have adjusted to text to reflect this, without using p values where 95% confidence intervals can be used instead.

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.

Response: This is not applicable to our study.

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%").

Response: We have checked the consistency of reporting data for decimal places and percentages.

12. Your manuscript contains a priority claim. 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 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 removed the sentence making a priority claim.

13. 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: We have checked the format of our tables according to the checklist.

14. When you submit your revision, art saved in a digital format should accompany it. If your figure was created in Microsoft Word, Microsoft Excel, or Microsoft PowerPoint formats, please submit your original source file. Image files should not be copied and pasted into Microsoft Word or Microsoft PowerPoint.

Response: We will include the original artwork for Figure 1, which was created using Microsoft Word.

When you submit your revision, art saved in a digital format should accompany it. Please upload each figure as a separate file to Editorial Manager (do not embed the figure in your manuscript file).

Response: We will ensure these are included in the final submission.

If the figures were created using a statistical program (eg, STATA, SPSS, SAS), please submit PDF or EPS files generated directly from the statistical program.

Response: Not applicable.

Figures should be saved as high-resolution TIFF files. The minimum requirements for resolution are 300 dpi for color or black and white photographs, and 600 dpi for images containing a photograph with text labeling or thin lines.

Response: We have compiled with this requirement.

Art that is low resolution, digitized, adapted from slides, or downloaded from the Internet may not reproduce.

Response: Not applicable.

15. Each supplemental file in your manuscript should be named an "Appendix," numbered, and ordered in the way they are first cited in the text. Do not order and number supplemental tables, figures, and text separately. References cited in appendixes should be added to a separate References list in the appendixes file.

Response: We have ensured supplementary material is ordered in this manner.

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 https://wkauthorservices.editage.com/open-access/hybrid.html.

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.

Response: Many thanks for this information. We will make sure to respond promptly.