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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)*

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

Date: Sep 02, 2022

To: "Meghan Bellerose"

From: "The Green Journal" em@greenjournal.org

Subject: Your Submission ONG-22-1398

RE: Manuscript Number ONG-22-1398

Association between the COVID-19 pandemic and national disparities in postpartum visit attendance

Dear Dr. Bellerose:

Thank you for sending us your work for consideration for publication in Obstetrics & Gynecology. Your manuscript has been reviewed by the Editorial Board and by special expert referees. The Editors would like to invite you to submit a revised version for further consideration.

If you wish to revise your manuscript, please read the following comments submitted by the reviewers and Editors. Each point raised requires a response, by either revising your manuscript or making a clear argument as to why no revision is needed in the cover letter.

To facilitate our review, we prefer that the cover letter you submit with your revised manuscript include each reviewer and Editor comment below, followed by your response. That is, a point-by-point response is required to each of the EDITOR COMMENTS (if applicable), REVIEWER COMMENTS, STATISTICAL EDITOR COMMENTS (if applicable), and EDITORIAL OFFICE COMMENTS below. Your manuscript will be returned to you if a point-by-point response to each of these sections is not included.

The revised manuscript should indicate the position of all changes made. Please use the "track changes" feature in your document (do not use strikethrough or underline formatting).

Your submission will be maintained in active status for 21 days from the date of this letter. If we have not heard from you by Sep 23, 2022, we will assume you wish to withdraw the manuscript from further consideration.

EDITOR COMMENTS:

Thank you for submitting your work to the Green Journal. We interested in publishing a revised version of your manuscript in the form of a Research Letter. You are welcome to use the Supplemental Digital Content to include a detailed description of the methods, Table 1 characteristics, and the supplemental material included in the original submission. If possible, please consider combining the pre-COVID attendance visit rates (Table 2) information with the COVID period change (Figure 1) into a single table or figure. Similarly, please consider combining Table 3 with the Figure 2 information into a single table or figure if possible.

In condensing your full length article into a Research Letter, we acknowledge that all the Reviewers' comments below may not be applicable or able to be addressed. Please explicitly note any comments that were not addressed in your response to review. In particular, please address a major concern by the Statistical Reviewer -- "There are multiple instances of comparisons in terms of one group having a change greater or less than other group. While some of these may be inferred from the figures, there is no description of stats test results, nor an indication of the error bars in the figures. Need to provide more stats results in order to compare various groups." You will see Reviewer 2 also had questions about the statistical approach, which will be answered with more information on the statistical testing.

Ultimately, we understand that you may not choose to condense your article and decline to revise your work as a Research Letter. Thank you again for your submission.

REVIEWER COMMENTS:

Reviewer #1: ONG 22-1398

In the manuscript under review, we evaluate the results of a retrospective analysis evaluating the rate of attendance to postpartum visit before and after the COVID-19 Pandemic. The authors used the PRAMS data from Jan 2016 to Dec 2020.

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The authors report that the disparities in routine postpartum visit attendance widened with COVID-19

A few comments on the manuscript are as follows:

ABSTRACT

1. No major issues identified.

INTRODUCTION

2. A strong argument is made for this analysis. A hypothesis is missing.

METHODS

- 3. Line 85 How was the study timeline chosen? How was decision made on how many years would be included in the pre-exposure group?
- 4. Line 86 During several initial months of the pandemic, various centers were offering virtual/telemedicine visits especially for postpartum. DO the authors have any data indicating that these visits were considered "a postpartum check" in the PRAMS questionnaire?
- 5. Line 98-100 This is a theme throughout the manuscript. The timeframe from Feb 2020 to December 2020 is not really "after" COVID-19 since the pandemic is still ongoing. A more appropriate term would be "during".
- 6. Did this analysis qualify for exempt status from the local IRB?
- 7. Please add a sentence stating the STROBE guidelines were followed throughout the manuscript.

RESULTS

- 8. Line 138 What was the degree of change set by the authors for the primary outcome? In other words, how was this sample size calculated?
- 9. Line 166 The information in table 2 is contained in table A3. I would suggest moving table A3 to the main text since this contains data on the primary outcome of interest.

DISCUSSION

10. As a general comment, each state managed the peaks in cases very differently. While some allowed normal routine to continue other imposed severe and restrictive lock downs. This uneven distribution of pandemic guidelines certainly impacted the ability and willingness of patients to attend postpartum visits. The effects of the disease itself, cases among family members and even death, may have affected rates of visits significantly. We also know that the disease had a racial distribution leading to higher rates of disease and mortality among minorities, contributing to the widening of the gap in disparities (lines 259-261). This needs to be included and developed further in the discussion section.

Reviewer #2:

In this retrospective pre-post study using the PRAMS database, the authors examine the differences in postpartum visit attendance in terms of patient demographic factors before versus "after" the COVID pandemic. Before diving into the study design, it's important to note that the authors should change "after COVID 19" to "during COVID19," given the end of the COVID pandemic (i.e. the true "after") appears nowhere in sight, unfortunately.

The study is interesting and has great potential in terms of public health implications, but analytic decisions reduce the potential impact of the findings. First, the authors chose to conduct only descriptive statistics. There is no comparison in the pre/"post" groups, aside from a difference in % attendance. Is this different statistically significant? Does the statistical significance remain once the difference is adjusted by potential confounders, like difference in self-reported race/ethnicity, insurance status, state of residence, etc between pre/"post" group? Essentially, the lack of inferential statistics means the authors cannot do anything more than a superficial dive of a potentially complex comparison. Second, the decision to analyze the entire post cohort as a homogeneous group reduces the granularity of the differences in postpartum attendance that could have occurred temporally or between states (what about comparing those with stay-at-home orders to those without, for example)? Lastly, the description in the methods of the qualitative research that the authors completed--described only as "open text analysis"--is inadequate. Did the authors assign the same thematic code to open text with different words but similar meaning ("couldn't take sick day" or "had to work" or "boss wouldn't let me attend" etc)? If so, the description of iterative vs deductive coding should be described, including explanation of how many authors reviewed each open text message and how the authors decided which responses were within the "covid-related reasons" and which were not. If authors only combined responses with the same exact phrasing, that should be included as a limitation.

Specific comments

#abstract: could benefit from more detail

- -lines 9-10: how were these reasons for not attending visits obtained and why only 7 states? This is more clear in methods but confusing here
- -open-text analysis aspect should be added more obviously to abstract
- -lines 22-25: consider rewriting to highlight the COVID specific reasons. The fact that nearly 1/4 responded selected "other" is too vague to be helpful

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#introduction:

- -line 50: clarify this is before the pandemic
- -line62-64: please add citation after the comma as otherwise this reads as conjecture

#methods

-line 84: self-reported postpartum visit as outcome adds response bias in a survey already at high-risk of selection bias. Both should be added as limitation

#results:

-line132: how were analyses weighted to account for PRAM's complex study design?

#discussion:

- -add limitations as per methods
- -line 236-241: how did this change over time?
- -lines 257-261: the first sentence is true but the second sentences (increase in perceived risk of attending pp visit) is conjecture. consider removing or reframing these sentences
- -line 279: how did the authors get 209,000 fewer people receiving postpartum care?

STATISTICAL EDITOR COMMENTS:

- Table 1: There are \sim 6000 missing from the maternal race section (difference of the sums vs 202,710). Need units for maternal age. Missing data from other categories, also. Need to enumerate all missing data.
- Table 2: Need to provide "n" for each of the row entries and enumerate all missing data. Need units for maternal age.
- Table 3: Need to state counts for total cohort and for each row entry
- Figs 1, 2: In figure legends or in figures, need to identify the error bars. ? 95% CIs, SE, etc

lines 11-25 and Results section: There are multiple instances of comparisons in terms of one group having a change greater or less than other group. While some of these may be inferred from the figures, there is no description of stats test results, nor an indication of the error bars in the figures. Need to provide more stats results in order to compare various groups.

Compared to the entire group, what were the response rates n(%) for the surveys? Unless those were < 70% at minimum, then there is the potential for selection bias and thus to generalizing the conclusions to the population of interest.

EDITORIAL OFFICE COMMENTS:

- 1. If your article is accepted, the journal will publish a copy of this revision letter and your point-by-point responses as supplemental digital content to the published article online. You may opt out by writing separately to the Editorial Office at em@greenjournal.org, and only the revision letter will be posted.
- 2. When you submit your revised manuscript, please make the following edits to ensure your submission contains the required information that was previously omitted for the initial double-blind peer review:
- * Funding information (ie, grant numbers or industry support statements) should be disclosed on the title page and at the end of the abstract. For industry-sponsored studies, describe on the title page how the funder was or was not involved in the study.
- * Include clinical trial registration numbers, PROSPERO registration numbers, or URLs at the end of the abstract (if applicable).
- * Name the IRB or Ethics Committee institution in the Methods section (if applicable).
- * Add any information about the specific location of the study (ie, city, state, or country), if necessary for context.
- 3. Obstetrics & Gynecology's Copyright Transfer Agreement (CTA) must be completed by all authors. When you uploaded your manuscript, each coauthor received an email with the subject, "Please verify your authorship for a submission to Obstetrics & Gynecology." Please ask your coauthor(s) to complete this form, and confirm the disclosures listed in their CTA are included on the manuscript's title page. If they did not receive the email, they should check their spam/junk folder. Requests to resend the CTA may be sent to em@greenjournal.org.
- 4. For studies that report on the topic of race or include it as a variable, authors must provide an explanation in the manuscript of who classified individuals' race, ethnicity, or both, the classifications used, and whether the options were defined by the investigator or the participant. In addition, describe the reasons that race and ethnicity were assessed in the Methods section and/or in table footnotes. Race and ethnicity must have been collected in a formal or validated way. If it was not, it should be omitted. Authors must enumerate all missing data regarding race and ethnicity as in some cases

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missing data may comprise a high enough proportion that it compromises statistical precision and bias of analyses by race.

Use "Black" and "White" (capitalized) when used to refer to racial categories.

List racial and ethnic categories in tables in alphabetic order. Do not use "Other" as a category; use "None of the above" instead.

Please refer to "Reporting Race and Ethnicity in Obstetrics & Gynecology" at https://edmgr.ovid.com/ong/accounts /Race_and_Ethnicity.pdf.

- 5. ACOG uses person-first language. Please review your submission to make sure to center the person before anything else. Examples include: "People with disabilities" or "women with disabilities" instead of "disabled people" or "disabled women"; "patients with HIV" or "women with HIV" instead of "HIV-positive patients" or "HIV-positive women"; and "people who are blind" or "women who are blind" instead of "blind people" or "blind women."
- 6. The journal follows ACOG's Statement of Policy on Inclusive Language (https://www.acog.org/clinical-information /policy-and-position-statements/statements-of-policy/2022/inclusive-language). When possible, please avoid using gendered descriptors in your manuscript. Instead of "women" and "females," consider using the following: "individuals;" "patients;" "participants;" "people" (not "persons"); "women and transgender men;" "women and gender-expansive patients;" or "women and all those seeking gynecologic care."
- 7. Please add whether you received IRB or Ethics Committee approval or exemption to your Methods. Include the name of the IRB or Ethics Committee. If you received an exemption, explain why in this section.
- 8. 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 quidelines:

STROBE: observational studies

Include the appropriate checklist for your manuscript type upon submission, if applicable, and indicate in your cover letter which guideline you have followed. 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 www.equator-network.org/.

- 9. 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.
- 10. Make sure your manuscript meets the following word limit. The word limit includes the manuscript body text only (for example, the Introduction through the Discussion in Original Research manuscripts), and excludes the title page, précis, abstract, tables, boxes, and figure legends, reference list, and supplemental digital content. Figures are not included in the word count.

Research Letters: 600 words (do not include more than two figures and/or tables [2 items total])

- 11. For your title, please note the following style points and make edits as needed:
- * 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 should not be used.
- * Titles should include "A Randomized Controlled Trial," "A Meta-Analysis," "A Systematic Review," or "A Cost-Effectiveness Analysis" as appropriate, in the subtitle. If your manuscript is not one of these four types, do not specify the type of manuscript in the title.
- 12. Specific rules govern the use of acknowledgments in the journal. Please review the following guidelines and edit your title page as needed:
- * 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

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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 or indicate whether the meeting was held virtually).
- * If your manuscript was uploaded to a preprint server prior to submitting your manuscript to Obstetrics & Gynecology, add the following statement to your title page: "Before submission to Obstetrics & Gynecology, this article was posted to a preprint server at: [URL]."
- * Do not use only authors' initials in the acknowledgement or Financial Disclosure; spell out their names the way they appear in the byline.
- 13. Provide a précis for use in the Table of Contents. The précis is a single sentence of no more than 25 words that states the conclusion(s) of the report (ie, the bottom line). The précis should be similar to the abstract's conclusion. Do not use commercial names, abbreviations, or acronyms in the précis. Please avoid phrases like "This paper presents" or "This case presents."
- 14. Be sure that each statement and any data in the abstract are also stated in the body of your manuscript, tables, or figures. Statements and data that appear in the abstract must also appear in the body text for consistency. Make 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 manuscript.

In addition, the abstract length should follow journal guidelines. Please provide a word count.

Research Letter: 125 words

- 15. 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.
- 16. The journal does not use the virgule symbol (/) in sentences with words, except with ratios. 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.
- 17. ACOG avoids using "provider." Please replace "provider" throughout your paper with either a specific term that defines the group to which are referring (for example, "physicians," "nurses," etc.), or use "health care professional" if a specific term is not applicable.
- 18. 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.

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

Express all percentages to one decimal place (for example, 11.1%"). Do not use whole numbers for percentages.

- 19. Please review the journal's Table Checklist to make sure that your tables conform to journal style. The Table Checklist is available at http://edmgr.ovid.com/ong/accounts/table_checklist.pdf.
- 20. Please review examples of our current reference style at https://edmgr.ovid.com/ong/accounts/ifa_suppl_refstyle.pdf. Include the digital object identifier (DOI) with any journal article references and an accessed date with website references.

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Please make sure your references are numbered in order of appearance in the text.

- 21. Figures 1 & 2: Figure files can be resubmitted as they are unless changes are requested by the Statistics Editor.
- 22. 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.

23. 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.

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.

If you choose to revise your manuscript, please submit your revision through Editorial Manager at http://ong.editorialmanager.com. Your manuscript should be uploaded as a Microsoft Word document. Your revision's cover letter should include a point-by-point response to each of the received comments in this letter. Do not omit your responses to the EDITOR COMMENTS (if applicable), the REVIEWER COMMENTS, the STATISTICAL EDITOR COMMENTS (if applicable), or the EDITORIAL OFFICE COMMENTS.

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

Again, your manuscript will be maintained in active status for 21 days from the date of this letter. If we have not heard from you by Sep 23, 2022, we will assume you wish to withdraw the manuscript from further consideration.

Sincerely,

Mark A. Clapp, MD, MPH Editorial Fellow

In compliance with data protection regulations, you may request that we remove your personal registration details at any time. (Use the following URL: https://www.editorialmanager.com/ong/login.asp?a=r). Please contact the publication office if you have any questions.

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Response to comments from Green Journal Editors and Reviewers

Manuscript title: "Association between the COVID-19 pandemic and national disparities in postpartum visit attendance"

September 22, 2022

We thank the Editor and the Reviewers for their review and comments. We have responded to each comment below. Editor and Reviewer comments are highlighted in grey. Text in italics is used to present the revised manuscript text. Line numbers represent the line number for the revised text in the manuscript revision file without track changes. We also confirm that we have read and implemented each of the Editorial Office Comments.

We would like to thank both you and the reviewers for providing such helpful guidance for improving the paper. We appreciate your consideration of our revised manuscript.

EDITOR'S OVERALL COMMENTS

1. Thank you for submitting your work to the Green Journal. We interested in publishing a revised version of your manuscript in the form of a Research Letter. You are welcome to use the Supplemental Digital Content to include a detailed description of the methods, Table 1 characteristics, and the supplemental material included in the original submission. If possible, please consider combining the pre-COVID attendance visit rates (Table 2) information with the COVID period change (Figure 1) into a single table or figure. Similarly, please consider combining Table 3 with the Figure 2 information into a single table or figure if possible.

In condensing your full-length article into a Research Letter, we acknowledge that all the Reviewers' comments below may not be applicable or able to be addressed. Please explicitly note any comments that were not addressed in your response to review. In particular, please address a major concern by the Statistical Reviewer -- "There are multiple instances of comparisons in terms of one group having a change greater or less than other group. While some of these may be inferred from the figures, there is no description of stats test results, nor an indication of the error bars in the figures. Need to provide more stats results in order to compare various groups." You will see Reviewer 2 also had questions about the statistical approach, which will be answered with more information on the statistical testing.

Thank you so much for the opportunity to revise our manuscript in the form of a Research Letter. We have implemented your suggestions including:

- Moving Table 1 and detailed description of the methods to the Supplemental Digital Content
- Combining Table 2 and Figure 1 into a single figure

- Combining Table 3 and Figure 2 into a single figure

We have also removed the results for no first trimester prenatal care, cesarean section, postpartum contraception, and postpartum depression, as we did not have adequate space in the shortened Research Letter to discuss these results.

We are grateful to the Statistical Reviewer and Reviewer 2 for highlighting the lack of clarity regarding our statistical methods. We have adjusted our methods description, both in the main text and Supplemental Digital Content to explain how we tested for statistical significance when calculating percentage point changes in postpartum visit attendance and reasons for nonuse, as well as differences in percentage point changes between sub-groups. These changes are described in more detail below.

REVIEWER 1

INTRODUCTION

1. A strong argument is made for this analysis. A hypothesis is missing.

Thank you for this comment. We hypothesized that postpartum visit attendance decreased nationally during the COVID-19 pandemic, with greater decreases among groups with lower prepandemic attendance. In the process of converting this manuscript to a 600-word Research Letter, we did not have sufficient space to include this sentence.

METHODS

2. Line 85 - How was the study timeline chosen? How was decision made on how many years would be included in the pre-exposure group?

Thank you for raising this question. The timeframe of 2016-2020 was chosen because 2016 was the first year that the survey included reasons for not attending a postpartum visit, and 2020 is the latest PRAMS data year available. 2021 data will not be released until the late spring or summer of 2023. We have added this detail to the Supplemental Digital Content Detailed Methods section. We have also added text to the study's methods to explain why we chose to begin our study period in 2016.

Line 31: "We also examined reasons for non-use in the seven states (AZ, IA, MD, UT, VA, WI) that, beginning in 2016, included questions asking respondents who did not attend a visit their reasons for non-use"

3. Line 86 - During several initial months of the pandemic, various centers were offering virtual/telemedicine visits especially for postpartum. DO the authors have any data indicating that these visits were considered "a postpartum check" in the PRAMS questionnaire?

This is a very important question. Unfortunately, there is no way to know the degree to which postpartum people considered telehealth visits "a postpartum check" based on the 2020 PRAMS questionnaire. We have added this detail to the Supplemental Digital Content Detailed Methods.

4. Line 98-100 - This is a theme throughout the manuscript. The timeframe from Feb 2020 to December 2020 is not really "after" COVID-19 since the pandemic is still ongoing. A more appropriate term would be "during".

Thank you for raising this concern. We have changed the term "after" to "during" throughout the manuscript.

5. Did this analysis qualify for exempt status from the local IRB?

As the data were completely de-identified, this study was not considered to be human subjects research by Brown University's Institutional Review Board (IRB) and therefore, this study did not require IRB review. We have added this information to the Methods section of the manuscript.

Line 42: "This study was considered not human subjects research by Brown University's Institutional Review Board."

6. Please add a sentence stating the STROBE guidelines were followed throughout the manuscript.

We have added this information to the Supplemental Digital Content Detailed Methods section.

RESULTS

7. Line 138 - What was the degree of change set by the authors for the primary outcome? In other words, how was this sample size calculated?

For all analysis, we considered changes and differences with an associated p-value less than 0.05 as calculated using linear regression models to be statistically significant. As the study sample size was fixed based on the size of the available PRAMS surveys and survey years, we did not conduct a power calculation.

8. Line 166 - The information in table 2 is contained in table A3. I would suggest moving table A3 to the main text since this contains data on the primary outcome of interest.

In the process of converting this manuscript to a Research Letter, per the suggestions of the Editor, we have only retained Figures 1 and 2 in the main text.

The initial purpose of Table A3 was to show the prevalence of postpartum visit attendance in the 7-state sample before and during the COVID pandemic so that it could be compared to the full sample. In our revised Figure 1 and the main text, we have included the prevalence of postpartum visit attendance before the pandemic, as well as the percentage point change in

attendance after the start of the pandemic in the full sample. Other information from our original Table 2 is now available in Table A3.

DISCUSSION

9. As a general comment, each state managed the peaks in cases very differently. While some allowed normal routine to continue other imposed severe and restrictive lock downs. This uneven distribution of pandemic guidelines certainly impacted the ability and willingness of patients to attend postpartum visits. The effects of the disease itself, cases among family members and even death, may have affected rates of visits significantly. We also know that the disease had a racial distribution leading to higher rates of disease and mortality among minorities, contributing to the widening of the gap in disparities (lines 259-261). This needs to be included and developed further in the discussion section.

Thank you for raising these important points. As we were asked by the Editors to transform this manuscript into a 600-word Research Letter, we did not have sufficient space to further develop these ideas in the discussion.

REVIWER 2

GENERAL

1. In this retrospective pre-post study using the PRAMS database, the authors examine the differences in postpartum visit attendance in terms of patient demographic factors before versus "after" the COVID pandemic. Before diving into the study design, it's important to note that the authors should change "after COVID 19" to "during COVID19," given the end of the COVID pandemic (i.e. the true "after") appears nowhere in sight, unfortunately.

Thank you for raising this concern. We have changed the term "after" to "during" throughout the manuscript.

2. The study is interesting and has great potential in terms of public health implications, but analytic decisions reduce the potential impact of the findings. First, the authors chose to conduct only descriptive statistics. There is no comparison in the pre/"post" groups, aside from a difference in % attendance. Is this different statistically significant? Does the statistical significance remain once the difference is adjusted by potential confounders, like difference in self-reported race/ethnicity, insurance status, state of residence, etc between pre/"post" group? Essentially, the lack of inferential statistics means the authors cannot do anything more than a superficial dive of a potentially complex comparison.

We appreciate the reviewer raising these concerns. We have adjusted our methods description, both in the main text and Supplemental Digital Content to explain that we did test for statistical significance when calculating percentage point changes using linear regression models. Then, to compare differences in the change between sub-groups, we used linear regression models with a group indicator, a pandemic indicator, and an interaction term between group and pandemic. We

now include p values in Figure 2 and Tables A3, A4, and A6. In Figure 1, we included a footnote explaining that all p values were <0.001.

Line 33 - "The study exposure was an indicator of whether the respondent's recommended postpartum visit date occurred during the pandemic. We used linear regression models to calculate the percentage point change in postpartum visit attendance and reasons for non-use after the start of the pandemic, overall and by subgroup. To compare differences in the change between sub-groups, we used linear regression models with a group indicator, a pandemic indicator, and an interaction term between group and pandemic."

3. Second, the decision to analyze the entire post cohort as a homogeneous group reduces the granularity of the differences in postpartum attendance that could have occurred temporally or between states (what about comparing those with stay-at-home orders to those without, for example)?

We agree that exploring changes in postpartum attendance between states with stay-at-home orders and those without would be very valuable. However, while our overall sample size is large, the dataset only includes 9 pandemic months, so we do not have the statistical power to analyze the sample broken out by month of the pandemic or state.

4. Lastly, the description in the methods of the qualitative research that the authors completed--described only as "open text analysis"--is inadequate. Did the authors assign the same thematic code to open text with different words but similar meaning ("couldn't take sick day" or "had to work" or "boss wouldn't let me attend" etc)? If so, the description of iterative vs deductive coding should be described, including explanation of how many authors reviewed each open text message and how the authors decided which responses were within the "covid-related reasons" and which were not. If authors only combined responses with the same exact phrasing, that should be included as a limitation.

Thank you for raising this excellent point. We initially had limited space in our methods section to describe the qualitative methods used to analyze open text responses. In the new Detailed Methods section in the Supplemental Digital Content, we explain our qualitative methods in greater detail. To answer your specific questions:

- We did assign the same thematic code to open text with different words. In Table A5 in the Supplemental Digital Content, we provide a description of each new code, when we did and did not apply it, and two or three illustrative examples showing different text that the code was applied to. All three of the examples you provided would have been recoded into the existing category "not able to leave work."
- We only assigned reasons as COVID-related if they included a COVID specific term ("COVID", "pandemic", "coronavirus", etc.) in order to avoid misclassifying respondents' reasons for not attending a visit. For instance, if someone wrote "afraid to leave home" this may be referencing COVID, but it may be general fear of leaving a new baby or a partner, etc.

ABSTRACT

- 5. #abstract: could benefit from more detail
 - -lines 9-10: how were these reasons for not attending visits obtained and why only 7 states? This is more clear in methods but confusing here
 - -open-text analysis aspect should be added more obviously to abstract
 - -lines 22-25: consider rewriting to highlight the COVID specific reasons. The fact that nearly 1/4 responded selected "other" is too vague to be helpful

Thank you for these suggestions. In the process of converting this manuscript to a Research Letter, we have shortened our abstract to 125 words, precluding us from adding these details. However, we have added a Detailed Methods section to the Supplemental Digital Content in which we describe why the seven states were selected for the sub-analysis, the survey question used to elicit reasons for non-attendance, and the methods used to analyze open-text responses.

6. Lines 22-25: consider rewriting to highlight the COVID specific reasons. The fact that nearly 1/4 responded selected "other" is too vague to be helpful

In our results section, we now highlight the COVID-specific reasons provided in open-text responses:

Line 58 - "The percent of respondents selecting "other" and writing in an open text response increased by 22.8 pp (17.7, 28.0). Common open-text responses indicated that COVID-19 made it more difficult to attend a visit by limiting access to childcare and by increasing fear of leaving home (Table A5)."

INTRODUCTION

7. line 50: clarify this is before the pandemic

In the initial manuscript, lines 46-51 stated: "Studies conducted at the health facility level have found that postpartum care attendance declined after the start of the pandemic.^{1,2} One of these studies, conducted in eight Boston-area hospitals, found that between January to March 2020, postpartum visit attendance fell by over 33 percentage points from 75.2% to 41.8% before rebounding to 60.9% by November 2021; however, the rebound was smaller and slower among Black non-Hispanic and Hispanic people compared to White non-Hispanic people.¹"

The decline between January and March 2020 referenced in this text describes the very early decline in visits during the first month of the pandemic. In the process of revising the manuscript to a Research Letter, we have shortened and simplified this sentence to make the timeframe clearer.

Line 22: "One multi-hospital study found a large decline in postpartum visits early in the pandemic, and a slower rebound among non-Hispanic Black and Hispanic compared to non-Hispanic White women."

8. Line 62-64: please add citation after the comma as otherwise this reads as conjecture

We have removed this line from the shortened manuscript, so it is no longer applicable.

METHODS

9. Line 84: self-reported postpartum visit as outcome adds response bias in a survey already at high-risk of selection bias. Both should be added as limitation

We agree self-reported data may be subject to response bias. As we compared changes in the study outcome in this study, we would be particularly concerned if misclassification of the study outcome due to response bias changed after the start of the pandemic. We have added this to the study limitations:

Line 68: "Limitations included use of self-reported outcome data, which could be subject to response bias, and the short duration of post-pandemic data available."

RESULTS

10. Line 132: how were analyses weighted to account for PRAM's complex study design?

PRAMS survey data accounts for selection bias through its survey weighting procedure. We have added the following text to the study methods:

Line 40: "All analyses used PRAMS survey weights, which account for non-response, non-coverage, and PRAMS' complex design."

In addition, we have added the following description of the PRAMS weighting procedure to the Detailed Methods in the Supplemental Digital Content:

"PRAMS surveys are representative of all state residents who delivered a live infant in a given year. Every month, each participating site draws a random stratified sample of between 100 to 250 people who recently gave birth from a frame of eligible birth certificates. This results in an annual sample of 1,000 to 3,000 participants. These individuals are mailed a PRAMS survey between two to six months after childbirth, with follow up by telephone. Smaller population subgroups and high-risk populations are oversampled to ensure adequate sample size. Using all birth certificate data from the state, non-response weights are applied to the data. These weights adjust for any differential non-response by patient characteristics that would otherwise result in selection bias."

DISCUSSION

11. Line 236-241: how did this change over time?

In the original manuscript, lines 236-241 referenced the COVID-related findings in the open-text responses. It would be fascinating to know how responses changed over the course of the pandemic. Unfortunately, as we only have 9 months of data during the pandemic period from 7 states and only a subset of people did not attend a postpartum visit and then wrote in a response for "other," we are not able to stratify responses by month to examine at patterns over time.

12. Lines 257-261: the first sentence is true but the second sentences (increase in perceived risk of attending pp visit) is conjecture. consider removing or reframing these sentences

Thank you for pointing out this issue. In the process of shortening the manuscript to a Research Letter, we have removed these sentences.

13. Line 279: how did the authors get 209,000 fewer people receiving postpartum care?

We apologize for including this number without explaining how it was calculated. As we no longer have space in this manuscript to provide additional detail, we have removed this line from the revised Research Letter.

STATISTICAL EDITOR COMMENTS

- 14. Table 1: There are ~ 6000 missing from the maternal race section (difference of the sums vs 202,710). Need units for maternal age. Missing data from other categories, also. Need to enumerate all missing data. N
- 15. Table 2: Need to provide "n" for each of the row entries and enumerate all missing data. Need units for maternal age
- 16. Table 3: Need to state counts for total cohort and for each row entry

Thank you for highlighting this issue. We now provide a note below Tables A1, A2, and A3 describing the degree of missingness for each outcome / subgroup.

We have also added n values to each row in Tables A1 and A2. We have not included the n values in Table A3, as they are identical to those presented in Table A2 and the table currently contains a lot of information. However, if the editors prefer, we could split this table into two tables to add the n values directly.

We have also added units to maternal age in all Tables and Figures.

17. Figs 1, 2: In figure legends or in figures, need to identify the error bars? 95% CIs, SE, etc

We apologize that we did not specify this in our original figures. These are 95% confidence intervals. We have added labels to Figure 1 and Figure 2 to indicate the that bars refer to 95% CIs.

18. Lines 11-25 and Results section: There are multiple instances of comparisons in terms of one group having a change greater or less than other group. While some of these may be inferred from the figures, there is no description of stats test results, nor an indication of the error bars in the figures. Need to provide more stats results in order to compare various groups.

We apologize for this omission of detail regarding our statistical methods. We have substantially expanded the information on our statistical approach in the Detailed Methods section in the Supplemental Digital Content, including how we compared percentage point changes in postpartum visit attendance between subgroups.

In the main text, we have added the following clarification:

Line 36: "We used linear regression models to calculate the percentage point change in postpartum visit attendance and reasons for non-use after the start of the pandemic, overall and by subgroup. To compare differences in the change between sub-groups, we used linear regression models with a group indicator, a pandemic indicator, and an interaction term between group and pandemic. All analyses used PRAMS survey weights, which account for non-response, non-coverage, and PRAMS' complex design."

In Figures 1 and 2, we now specify that the error bars represent 95% confidence intervals, and in Figure 2 and Tables A3, A4, and A6, we include p values. In Figure 1, we included a footnote explaining that all p values were <0.001.

19. Compared to the entire group, what were the response rates n(%) for the surveys? Unless those were < 70% at minimum, then there is the potential for selection bias and thus to generalizing the conclusions to the population of interest.

During the study period, the survey response rates ranged from 50.4% to 70.6% by state-year. Between 2015-2017, PRAMS had a minimum threshold of 55% to release a given state year. This was lowered to 50% for 2018-2020. However, as described above, PRAMS survey weights are created using all birth certificate records in a given state and year to account for survey non-response, so that the estimates from PRAMS data apply to the state population.

References

- 1. Mi T, Hung P, Li X, McGregor A, He J, Zhou J. Racial and Ethnic Disparities in Postpartum Care in the Greater Boston Area During the COVID-19 Pandemic. *JAMA Network Open.* 2022;5(6):e2216355-e2216355.
- 2. Sangtani A, Clifford C, Hesson A, Greco P, Stout MJ, Langen ES. 702 Postpartum depression screening during the COVID-19 pandemic. *American Journal of Obstetrics & Gynecology*. 2021;224(2):S440.