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

Questions about these materials may be directed to the Obstetrics & Gynecology editorial office: obgyn@greenjournal.org.
Date: Dec 20, 2018
To: "Fatimah Z. Fahimuddin"
From: "The Green Journal" em@greenjournal.org
Subject: Your Submission ONG-18-2229

RE: Manuscript Number ONG-18-2229

The Readability of Online Patient Education Materials from Major Obstetrics and Gynecology Societies

Dear Dr. Fahimuddin:

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

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

Your paper will be maintained in active status for 21 days from the date of this letter. If we have not heard from you by Jan 10, 2019, we will assume you wish to withdraw the manuscript from further consideration.

REVIEWER COMMENTS:

Reviewer #1: This is a descriptive study looking at the readability, or grade level content, for obstetric and gynecology specialty patient education literature on line and analysis of whether it adheres to recommendations to be at sixth grade level. I think this is a very interesting study. My major concern was the selection of tools for assessing grade level content. With 10 tools listed in the references why these four and how have they been validated in the medical literature?

Abstract:
Line 57 The format in instructions to authors for original research should be objectives not introduction.

Clearly state what your objective is in this section.

Line 60 Where is the reference for the cost 106-238 billion annually? I find it later on line 210 but it should be upfront with first use.

Line 71-72 The test and scores listed are not familiar to most readers. Can you translate back to suggest grade level for FRE in particular?

Introduction:
This is an excellent review of the literature and rationale for this study.

Line 115 The reference cited JAMA internal medicine 173, no. 13 (2013): 1257-1259 did review Ob patient information and showed a wide range of grade levels from 6-11.4. This was also noted across other specialties. It seems very dependent on the tool being used. There should be further discussion about how these tools are applied or validated in the medical literature.

What specifically makes this study different from the cited references?

Material and methods:

Line 121-126 Describe how the authors decided the "articles" were educational content and what searches were performed. There may be cross over between professional publications intended for a different audience vs. truly patient education. Was there more than one reviewer and if there was a discrepancy about the type of content how was it adjudicated? I did see at the end the appendix. Please reference this in this section.

Line 132 Although videos were not assessed this is a limitation of the study and listed in some of the articles as a means
to overcome complex education material not readily comprehensible. If you do have data on the number of videos either linked or attached to educational content this would be very interesting to see. Although it may not be able to be assessed using the tools listed the correlation with grade level could be telling.

Line 134-148 Please describe why these specific tools were used to assess readability. In the references there were ten tests used to evaluate the literature. Specific to Ob the SMOG had a significantly higher grade level than the other tests.

Looking at some of the components of the FKGL utilizing syllable count it is not surprising the grade level would be higher. Is there a way to control for the use of simpler synonyms? From a consent perspective it is common to write both the medical as well as common terminology for what something is. This may be inflating the grade level. There is acknowledgement of this issue in the discussion.

Results:

Table 1. This explains a little more about the articles and search criteria however each site is not completely divided into patient education FAQ vs. other general publications. The ASRM link has patient bookshelf, patient education and patient website. The content clearly is going to vary by educational level. This needs to be clarified across the searches. Same critique listed in material and methods please site appendix at the end.

Table 2 I would suggest putting the correlation of reading for the FRE in the legend. It is described in the materials and methods however since this is the one score that does not directly translate into a grade it would be helpful.

Figures 1 and 2. Don't add anything that is not in table 2 and 3. The scales also mix the scores from FRE and grade level on the y axis which is confusing.

Reviewer #2:

Overview: This manuscript assesses the reading level of online patient materials. The authors found that patient education materials offered by various societies were written above the recommended sixth-grade reading level.

I recommend the following revisions:

-Title and Abstract: The title reflects the focus of the manuscript. The abstract is overall clear and concise, but the Introduction makes it seem as if this manuscript will be about cost. Consider cutting the second sentence. The last sentence in the Introduction is also a stretch, since your manuscript doesn't address whether women can or do access these specialty-specific materials. In Results, these scales are unfamiliar to the average OB/GYN - would recommend a more "qualitative" description, e.g. average readability was twelfth grade, did not differ between OB and GYN, and only XX of the 410 articles were at or below 6th grade level.

-Introduction: The introduction clearly describes reasoning for answering this clinical question.

Last sentence in first paragraph (line 84-85) is unclear.

Line 90: "proficiency" should be "proficient".

-Methods: Overall clear.

Why did you choose the scales that you chose?

What were the dates that you accessed the articles? Were they all publicly-accessible?

Please explain why miscarriage is an OB topic and abortion is a GYN topic.

-Results/Tables:

Table 2/Figure 1 and Table 3/Figure 2 present duplicate information. Recommend deleting the figures.

Appendix A: "Oophorectomy" has an FRE score of 0 - check this.

Delete lines 168-170.

Consider a table that includes the data from lines 176-178 (% of articles at each grade level) for each specialty.

Is there a correlation between the different readability scales?

Delete lines 186-188.
Discussion:
The cited cost (line 210) is 2003 data from Vernon et al Low Health Literacy: Implications for National Health Policy, not from the papers you cited. (Can be accessed at https://publichealth.gwu.edu/departments/healthpolicy/CHPR/downloads/LowHealthLiteracyReport10_4_07.pdf)

Citation for lines 213-214?

Paragraph lines 238-243 does not relate clearly to the topic of this paper. Consider deleting.

Include as a limitation that you changed bullet points to sentences, as some of the scales include sentence length in calculating readability.


Reviewer #3: This is a very important and understudied area within obstetrics and gynecology. Health literacy is very important. This is a unique study and helpful to our field. I commend the authors for this research.

Abstract - well written, reflects accurately the purpose and findings of the study

Intro: well written, succinct. Provides good background for the study

Methods:
-Why were videos and infographics not included in the study? Was there any data collected on methods (reading vs video, etc) most used by the readers?
-Several of the readability scales might not be appropriate for OBGYN educational literature. This was addressed by authors later in the paper
-How were the educational materials selected? Were all available materials reviewed? Or certain topics only? Why were contraception and pap smear screening not included?

Discussion:
-Now that we have this information, how can we improve?
-How can we create useful patient education in the future?

Reviewer #4: Thank you for the opportunity to review this manuscript regarding the readability of online patient education material (PEM) from major Ob/Gyn societies. The relevance and discoveries of this manuscript are important. This message is important - our society-produced PEM needs to be more 'accessible' - i.e. written at a 6th grade or lower reading level if its intent is to educate and increase the health literacy of the women for whom we care. That being said, my enthusiasm for this manuscript is tempered for a number of reasons addressed in the following comments:

- The majority of readers of the Green Journal will have limited to no familiarity with readability scales. Thus it is recommended that authors do a number of things to make the information in their manuscript more accessible.

For example:
(1) A table to which the reader can refer readily that includes each scale, the range of scores, the content considered in calculating the scores, and the score range that is equivalent to 6th grade or below would be helpful.
(2) As for some scales higher scores are correlated with a lower grade reading proficiency level, and for some scales lower scores are correlated with a lower grade reading proficiency level, the various figures that include the scores need better footnotes to indicate that.
(3) In general, it would clearer/cleaner, if the conversion from score numbers to grade equivalency was made when reporting results in text, figures and tables. FKGL and SMOG are essentially grade equivalents already. However FRE and GFS are not and are scored in the opposite directions. Finding a way to norm them would be helpful.

- Lines 84-85: The meaning of the sentence starting 'However' is not clear - to what is the lack of clarity referencing?

- Lines 97-98: Consider changing this sentence to something like - 'Persons of Hispanic ethnicity and African American race were found to have the lowest health literacy levels amongst all ethnic/racial groups.'

- The paragraph from lines 100-108 addresses confounding related to low health literacy, this should be revisited in the
discussion.

- Line 121 - the United States is a country/land mass, it does not 'recognize' anything - who recognizes these societies? (reword)

- Line 131-132 mentions that websites, figures, pictures, etc are not included in assessment of readability. This is a significant limitation and should be addressed minimally in the discussion more thoroughly especially as the authors state (line 234-236) that visual PEMs are an important ways to convey education across age, education, and ethnicity/race but they were removed from this analysis. Consider capturing for each article how many did or did not have these and the other components mentioned. Also consider addressing literature ref how accessible these types of adjuncts to test are with regards to health literacy.

- Paragraph lines 134-146: Each of the scales and the scoring should have a reference.

- Please address the typos vs grammatical issues that occur throughout the manuscript

STATISTICAL EDITOR COMMENTS:

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

lines 70-73: It is not clear from this summary how the 4 numbers cited for obstetrics or gynecology relate to the apparent desired threshold of a 6th grade reading level. Need to concisely clarify this.

lines 87-98: Do each of these references apply to the population in general, or just to women? Readability for women (lines 75-77) are the focus of this analysis.

lines 134-148: The readability scales cited often use syllable count (with ≥ 3 syllables as a common threshold). What was the breakdown in each of the scales for syllable counts vs other criteria? It would seem that some of the medical terms used would have ≥ 3 syllables and use of a glossary with simple explanations could avoid this issue. In other words, are these readability scales applicable to medical educational materials and how much would the scales be modified if there were inclusion of a glossary of terms?

Table 2: Although mean±SD is a generally useful metric, some of the samples (Table 1) were modest and median(range or IQR) might be more appropriate. Also, if grade level = 6 is the threshold, then citing how many in each category were at or below grade 6 would be even more useful.

EDITOR COMMENTS:

1. Thank you for your submission to Obstetrics & Gynecology. In addition to the comments from the reviewers above, you are being sent a notated PDF that contains the Editor’s specific comments. Please review and consider the comments in this file prior to submitting your revised manuscript. These comments should be included in your point-by-point response cover letter.

***The notated PDF is uploaded to this submission’s record in Editorial Manager. If you cannot locate the file, contact Randi Zung and she will send it by email - rzung@greenjournal.org.***

- could you rewrite precis to avoid using "nationally" twice in same sentence?

- The objective for the abstract should be a simple "to" statement without background.

- how were these chosen?

- Since you will have more words to use in the methods section with a much shortened introduction of your abstract, could you explain that these are all computer-based assessments of readability, that use different characteristics to make that assessment?

- there are more than 8 ob gyn societies. Could you state in the methods what those societies are or briefly how you selected them? Also, please look at the instructions for authors about abbreviations. You will need to spell out all of the abbreviations for the different readability scores throughout your abstract and paper
Very few of our readers will know the significance of these numbers. Are they good numbers? Are they bad? you’ve said that reading level should be at the 6th grade level. How do these scores relate to grade level? Could you instead of giving the specifics for the different readability scores, could you instead make some summative description such as "For 69 obstetric-related articles, the average grade level for the 4 readability scores was xxx (give range) and 341 gynecology-related articles, the average was yyy(give range)."

you haven’t established in this section that there is a lack of clarity. please do so.

the IOM is now called the National Academy of Medicine. (https://nam.edu/)

what was this? a survey? Who did it?

Not an acceptable abbreviation. We are pretty vigilant about abbreviations because they can make it very hard, if they are not standard and commonly used, for the reader who may need to keep going back to recall their meaning.

accessibility or readability?

how selected? how obtained? Did the societies send them or did you download them?

what do you mean "recognized by the United State". Do you mean that these are US-based organizations? Please also state why you selected these 8 as there are of course others.

why?

explain why

explain why given their potential role in improving understanding.

why selected these 4?

This sentence is unclear. The score isn’t meant for the students. Its papers with this reading level that are meant for college and graduate students (and graduates, not just students, right?)

The Journal style doesn’t not use the virgule (/) except in numeric expressions. Please edit here and in all instances.

please clarify in your report of results if any organization produces any patient education materials at the appropriate reading level or do all of them exceed that?

Perhaps nicer flow to state. "The mean readability scores and standard deviations......are shown in Table 2".

are these the corresponding grade levels? These are clearly not grade levels. Can you translate them into grade levels?

do you mean for AUGS?

I’m pretty confused by this paragraph. Please clarify: The materials from AUGS seems like it is written at a relatively lower educational level than that of the other organizations. By one scoring system they achieved a 6th grade level or less in 15 of the 18 examples while using the other scoring system, this wasn't the case. Is that right?

how is it known that the internet is the MOST frequent place people turn?

again, important to note if any of the organizations (like AUGS) provide some appropriate level materials or all organizations providing all materials too advanced?

guide for physicians

what is a visual PEM?

what do you mean "missing labs/imaging"? Do you mean the patient didn't obtain them?

What do you recommend societies do when developing pat. ed materials? Is thee one scale you found to be better? Should they use focus groups of lay readers? What are some potential solutions?

In addition to the above noted concerns, please address the following:

a. Perhaps a box could be included which indicates what criteria are included for the different readability scales would be
helpful to understand how different scales are measured so that different scores can be better understood while the reader is going through the paper.

b. Please comment on the following: Medical terminology is often necessary in patient education materials and often has 3 or more syllabus: Think "uterus" and "ovary". Please make some suggestions for the writers of patient education materials how such terms could be avoided in order to avoid being "dinged" for 3 syllables words. It seems incredibly difficult to do so.

c. To this end, could you give a breakdown as to why so many papers failed? are they mostly on 3 syllables? You could do that overall or by reading scale.

d. Could you comment in your discussion that these scales only address issues that determine grade level--they don't address problems of just poorly written patient education materials.

Thanks

2. The Editors of Obstetrics & Gynecology are seeking to increase transparency around its peer-review process, in line with efforts to do so in international biomedical peer review publishing. If your article is accepted, we will be posting this revision letter as supplemental digital content to the published article online. Additionally, unless you choose to opt out, we will also be including your point-by-point response to the revision letter, as well as subsequent author queries. If you opt out of including your response, only the revision letter will be posted. Please reply to this letter with one of two responses:
1. OPT-IN: Yes, please publish my response letter and subsequent email correspondence related to author queries.
2. OPT-OUT: No, please do not publish my response letter and subsequent email correspondence related to author queries.

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

Any author agreement forms previously submitted will be superseded by the eCTA. During the resubmission process, you are welcome to remove these PDFs from EM. However, if you prefer, we can remove them for you after submission.

4. Our journal requires that all evidence-based research submissions be accompanied by a transparency declaration statement from the manuscript's lead author. The statement is as follows: "The lead author* affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained."
*The manuscript's guarantor.

If you are the lead author, please include this statement in your cover letter. If the lead author is a different person, please ask him/her to submit the signed transparency declaration to you. This document may be uploaded with your submission in Editorial Manager.

5. 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 Materials and Methods section, 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 Materials and 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.

6. Standard obstetric and gynecology data definitions have been developed through the reVITALize initiative, which was convened by the American College of Obstetricians and Gynecologists and the members of the Women's Health Registry Alliance. Obstetrics & Gynecology has adopted the use of the reVITALize definitions. Please access the obstetric and gynecology data definitions at https://www.acog.org/About-ACOG/ACOG-Departments/Patient-Safety-and-Quality-Improvement/reVITALize. If the use of the reVITALize definitions is problematic, please discuss this in your point-by-point response to this letter.

7. Because of space limitations, it is important that your revised manuscript adhere to the following length restrictions by manuscript type: Original Research reports should not exceed 26 typed, double-spaced pages (6,500 words). Stated page limits include all numbered pages in a manuscript (i.e., title page, précis, abstract, text, references, tables, boxes, figure legends, and print appendixes) but exclude references.

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

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

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

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

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

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

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

13. Please review the journal’s Table Checklist to make sure that your tables conform to journal style. The Table Checklist

14. Figures 1-2 may be resubmitted as-is.

15. 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

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publication route (traditional or open access). Please keep an eye out for that future email and be sure to respond to it
promptly.

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

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

Again, your paper will be maintained in active status for 21 days from the date of this letter. If we have not heard from you
by Jan 10, 2019, we will assume you wish to withdraw the manuscript from further consideration.

Sincerely,

Nancy C. Chescheir, MD
Editor-in-Chief

2017 IMPACT FACTOR: 4.982
2017 IMPACT FACTOR RANKING: 5th out of 82 ob/gyn journals

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