

## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

## ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	The Attitudes toward Defensive Medicine among Physicians of Obstetrics and Gynecology in China: A Questionnaire Survey in A National Congress
<b>AUTHORS</b>	Zhu, Lan; Li, Lei; Lang, Jinghe

## VERSION 1 – REVIEW

<b>REVIEWER</b>	Mert Kucuk Mugla Sıtkı Kocman University Faculty of Medicine
<b>REVIEW RETURNED</b>	01-Oct-2017

<b>GENERAL COMMENTS</b>	<p>The study addresses a topic debated in Obstetrics and Gynecology. However there are some important points to be clarified.</p> <ol style="list-style-type: none"><li>1. The study tables do not exist or I have not been able to find them.</li><li>2. How do you explain the overwhelming number of female obstetricians and gynecologists. (90%)</li><li>3. Why do so many participants have administrative duties.? (About 1/3)</li><li>4. How many Obgyns are working in China.? What are their genders and subspecialties. How do you think that the study sample is representative of whole China?</li><li>5. Is it possible to practice solely obstetrics or Gynecology in China. Are there any night duties in the delivery room or emergency settings?</li><li>6. The language of the study should be simplified. The results should be given more reader friendly.</li><li>7. Minor errors in referencing such as reference 22.</li><li>8. Why didn't you validate the questionnaire?</li><li>9. In The subsection titled as "Participants' preference about defensive medicine" the practices and roles should also be addressed in this section.</li></ol>
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<b>REVIEWER</b>	Elad Asher Assuta-Ashdod medical center, Ashdod, Israel.
<b>REVIEW RETURNED</b>	31-Oct-2017

<b>GENERAL COMMENTS</b>	<p>Overall this is an important study on an important topic, nevertheless the language must be revised. The paper sections needs to be re-arrange and the take home message need to be clearer.</p> <p>Specific comments:  Abstract:  1. Participant – first line: "Among 1804 registered physicians participating the 2017 Congress of Chinese..." should add "at" the 2017 congress....  2. Results: please re arrange the numbers 283/1486; 170/283.  3. Results: please insert numbers and percentage to the abstract results section. The data need to be shown there.  4. Conclusions: "About two-thirds of Chinese physicians practicing obstetrics and gynecology in our survey agreed with defensive medicine..." What do you mean???? Agree with what? Do they practice defensive medicine? Do they acknowledge the existence of defensive medicine? Please explain.  5. Strengths and limitations of this study "As to our knowledge this is first report..." please add "the" after "this is".</p> <p>Introduction:  6. "The concept of defensive medicine appeared in 19781, and is now defined as" it is not NOW defined. This is only one of the definitions. Please correct.  7. Please add the definitions of positive and negative defensive medicine.</p> <p>Methods:  8. Questionnaire: What is PUMCH?  9. Please add the questionnaire to the appendix of the article  10. Participants: "Participants comes across the country of China" please correct to came instead of comes.  11. Participants: 90% of the participants were female!!! Why is that? Is the total OBGYN population in China comprised mainly from women?  12. The participants part needs to be at the results section not at the methods section. Please correct.</p> <p>Results:  13. I don't see table 2 and 3 please add  14. Again, what do you mean by sating agree with defensive medicine?????  15. Factors having impacts on participants' preference: "In univariate analysis, most epidemiologic characteristics and personal experiences had pertinence to participants' viewpoints and preferences of defensive medicine....." Until (Table 4) please replace it in the methods section instead of the results section.</p> <p>Discussion  16. The discussion is too long and the take home message is not clear enough.</p>
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## VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Reviewer Name: Mert Kucuk

Institution and Country: Mugla Sıtkı Kocman University Faculty of Medicine

Please state any competing interests or state 'None declared': None

Please leave your comments for the authors below

The study addresses a topic debated in Obstetrics and Gynecology.

However there are some important points to be clarified.

1. The study tables do not exist or I have not been able to find them.

Response:

Thanks. Great sorry for this fault. We have supplied relate tables.

2. How do you explain the overwhelming number of female obstetricians and gynecologists. (90%)

Response:

Thanks. This constitution reflects the practical situation in China. According to a survey conducted by Chinese Medical Doctor Association in 2015 (<http://www.cmda.net/zwqgzdt/596.jhtml>), among 150 000 physicians engaged in Ob & Gyn and midwives, only 10% were male. In the department of Ob & Gyn of Peking Union Medical College Hospital, 33/118 (30.0%) physicians are male, which is marvellously high proportion.

3. Why do so many participants have administrative duties.? (About 1/3)

Response:

Thanks. The specific reasons are not clear. As Chinese Medical Doctor Association is a semi-official organization, participants with administrative duties had more opportunities and sponsors to attend the national Congress.

4. How many Obygns are working in China.? What are their genders and subspecialities. How do you think that the study sample is representative of whole China?

Response:

Thanks. In 2015 there were 150 000 midwives and physicians engaged Ob & Gyn, 10% of which were female. But the subspecialities are not very explicit. As more than half participants came from tertiary hospital, and one third had administrative duties, this study had great limitation of sampling, although the conclusion had been adjusted with confounding factors.

5. Is it possible to practice solely obstetrics or Gynecology in China. Are there any night uties i the delivery room or emergency settings?

Response:

Thanks. Yes, most physicians in tertiary hospital are practicing solely obstetrics or Gynecology in China, after they have finished enough training in Ob & Gyn, including night duties in delivery room or emergency settings. Authors of this study had 15-20 years of training before we were engaged in special subspecialities.

6. The language of the study should be simplified. The results should be given more reader riendly.

Response:

Thanks. We have tried to simplify the language.

7. Minor errors in referreencing such as reference 22.

Response:

Thanks, we have modified the errors.

8. Why didn't you validate the questionnaire?

Response:

Thanks. We have validated the questionnaire.

9. In The subsection titled as "Participants' preference about defensive medicine" the practices and roles should also be addressed in this section.

Response:

Thanks. The practices and roles of defensive medicine have also be addressed in this section.

Reviewer: 2

Reviewer Name: Elad Asher

Institution and Country: Assuta-Ashdod medical center, Ashdod, Israel.

Please state any competing interests or state 'None declared': None

Please leave your comments for the authors below

Dr. Lei Li et al. were seeking to determine prevalence, patterns, and risk factors of defensive medicine by obstetricians and gynecologists across China. They used a questionnaire survey by written and online interview for participants.

Overall this is an important study on an important topic, nevertheless the language must be revised.

The paper sections needs to be re-arrange and the take home message need to be clearer.

Specific comments:

Abstract:

1. Participant – first line: "Among 1804 registered physicians participating the 2017 Congress of Chinese..." should add "at" the 2017 congress....

Response:

Thanks. The error has been modified.

2. Results: please re arrange the numbers 283/1486; 170/283.

Response:

Thanks. These figures have been modified.

3. Results: please insert numbers and percentage to the abstract results section. The data need to be shown there.

Response:

Thanks. However, as shown in Table 4, influencing factors had different impact on the various items of questionnaire, lots of figures or percentages are needed to insert to the abstract.

4. Conclusions: "About two-thirds of Chinese physicians practicing obstetrics and gynecology in our survey agreed with defensive medicine..." What do you mean???? Agree with what? Do they practice defensive medicine? Do they acknowledge the existence of defensive medicine? Please explain.

Response:

Yes, most physicians agreed with defensive medicine. This finding is confirmed by other reports in different countries and cultures. Nevertheless, as shown in the "Participants' preference about defensive medicine" of the result part, participants had diverse attitudes toward the practices and harms of defensive medicine.

5. Strengths and limitations of this study "As to our knowledge this is first report..." please add "the" after "this is".

Response:

Thanks. We have modified the error.

Introduction:

6. "The concept of defensive medicine appeared in 19781, and is now defined as" it is not NOW defined. This is only one of the definitions. Please correct.

Response:

Thanks. We have modified the statement.

7. Please add the definitions of positive and negative defensive medicine.

Response:

Thanks. Although some authors (including some reports in Chinese) differentiated defensive medicine as "positive" and "negative", but we don't agree these definitions. We regard defensive medicine in general as a negative behavior.

Methods:

8. Questionnaire: What is PUMCH?

Response:

Thanks. We have corrected the statement.

9. Please add the questionnaire to the appendix of the article.

Response:

Thanks. We have listed the items in Table 1.

10. Participants: "Participants comes across the country of China" please correct to came instead of comes.

Response:

Thanks. We have modified the error.

11. Participants: 90% of the participants were female!!! Why is that? Is the total OBGYN population in China comprised mainly from women?

Response:

Yes. We have clarified the issue. Most OBGYN population in China is comprised mainly from women.

12. The participants part needs to be at the results section not at the methods section. Please correct.

Response:

Thanks. We have correct the problem.

Results:

13. I don't see table 2 and 3 please add

Response:

Sorry about this error. We have supplied the tables.

14. Again, what do you mean by sating agree with defensive medicine?????

Response:

Thanks. We just mean most physicians agreed that they would choose defensive medicine to prevent them from lawsuits. But as to definite practices and harms of defensive medicine, they had diverse preferences. It is very interesting.

15. Factors having impacts on participants' preference: "In univariate analysis, most epidemiologic characteristics and personal experiences had pertinence to participants' viewpoints and preferences of defensive medicine....." Until (Table 4) please replace it in the methods section instead of the results section.

Response:

Thanks. But we are sorry we couldn't replace these statements because they are indeed the results of analysis.

Discussion

16. The discussion is too long and the take home message is not clear enough.

Response:

Thanks. We have made the modification.

### VERSION 2 – REVIEW

<b>REVIEWER</b>	Elad Asher Assuta-Ashdod university hospital, Israel.
<b>REVIEW RETURNED</b>	06-Dec-2017
<b>GENERAL COMMENTS</b>	The Authors did not addressed comments 2, 4, 7, 9, 10, 11, 14, 15 of my previous review. Please correct.

### VERSION 2 – AUTHOR RESPONSE

Reviewer: 2

Reviewer Name: Elad Asher

Institution and Country: Assuta-Ashdod medical center, Ashdod, Israel.

Please state any competing interests or state 'None declared': None

Please leave your comments for the authors below

The Authors did not addressed comments 2, 4, 7, 9, 10, 11, 14, 15 of my previous review. Please correct. Specific comments:

General response:

Great thanks for your instructions! We are very sorry for previous ambiguous/incorrect statements, and we have make an effort to specifically modify and clarify them. We sincerely wish these modification and clarification would get accorded with your invaluable suggestions and instructions.

2. Results: please re arrange the numbers 283/1486; 170/283.

Response:

Thanks. These figures have been checked and modified again (Page 2, Line 27-28).

4. Conclusions: "About two-thirds of Chinese physicians practicing obstetrics and gynecology in our survey agreed with defensive medicine..." What do you mean???? Agree with what? Do they practice defensive medicine? Do they acknowledge the existence of defensive medicine? Please explain.

Response:

Thanks. In our study, a brief introduction about defensive medicine was listed at the beginning of the questionnaire. Therefore the surveyed physicians were supposed to acknowledge the existence of defensive medicine. Despite of the acknowledgement, most physicians still agreed with the practice of defensive medicine, although they probably did not practice defensive medicine in their profession. We have made a modification in the "conclusions" part and other parts(replace "agreed with defensive medicine" with "agreed with the practice of defensive medicine", Page 2, Line 40; Page 5, Line 160; Page 7, Line 260). This finding is confirmed by other reports in different countries and cultures. However, as shown in the "Participants' preference about defensive medicine" of the result part, as to various manifestations of defensive medicine, participants had diverse attitudes toward definite practices and harms.

7. Please add the definitions of positive and negative defensive medicine.

Response:

Thanks. We have added the definitions (Page 5-6, Line 184-186).

9. Please add the questionnaire to the appendix of the article.

Response:

Thanks. We have listed the items in Table 1 and in the Supplement 1.

10. Participants: "Participants comes across the country of China" please correct to came instead of comes.

Response:

Thanks. We have modified the error (Page 4, Line 103)

11. Participants: 90% of the participants were female!!! Why is that? Is the total OBGYN population in China comprised mainly from women?

Response:

Thanks. Yes, total OBGYN population in China comprised mainly from women. According to a survey conducted by Chinese Medical Doctor Association in 2015 (<http://www.cmda.net/zlwqgzdt/596.jhtml>), among 150 000 physicians engaged in Ob & Gyn and midwives, only 10% were male. In the department of Ob & Gyn of Peking Union Medical College Hospital, 33/118 (30.0%) physicians are male, which is marvellously high proportion.

14. Again, what do you mean by sating agree with defensive medicine?????

Response:

Thanks. We just mean that most physicians in our study still agreed with the practice of defensive medicine. However, in real-world situations, they may or may not practice defensive medicine. In our study participants had diverse preferences and understanding of specific practices, harms of defensive medicine and physician's roles. We have made a modification in the "conclusions" part and other parts(replace "agreed with defensive medicine" with "agreed with the practice of defensive medicine", Page 2, Line 40; Page 5, Line 160; Page 7, Line 260).

15. Factors having impacts on participants' preference: "In univariate analysis, most epidemiologic characteristics and personal experiences had pertinence to participants' viewpoints and preferences of defensive medicine....." Until (Table 4) please replace it in the methods section instead of the results section.

Response:

Thanks. We have added relevant statement in the method section (Page 4 Line 116-118).

**VERSION 3 – REVIEW**

<b>REVIEWER</b>	Elad Asher Assuta-Ashdod University Hospital
<b>REVIEW RETURNED</b>	30-Dec-2017
<b>GENERAL COMMENTS</b>	The authors have answered all comments.