

November 27, 2023

World Journal of Psychiatry

Dear Editor,

Thank you for your kind consideration of our work as well as your efforts in organizing the review process for our manuscript (ID: 89419).

The reviewers' comments were valuable for helping us revise and improve our paper. We appreciate the important guidance provided regarding our study. We have checked all of the comments carefully and revised the text accordingly. We have made corrected modifications on the revised manuscript. Meanwhile, the manuscript had be reviewed and edited by language services We thank the reviewers for their thoughtful comments and suggestions and hope that the revised manuscript will now be acceptable for publication in *World Journal of Psychiatry*.

Thank you for your consideration. I look forward to hearing from you.

Best wishes,

Shuai Zhang and Lin Shen

Respose to the Editors

(1) Science editor:

1 Conflict of interest statement: Academic Editor has no conflict of interest.

Reply: Thank you very much.

2 Manuscript's theme: The topic is within the scope of the journal.

Reply: Thank you for your careful reading.

3 Academic misconduct: No academic misconduct was found.

Reply: Thank you for your careful reading.

4 Scientific quality and comments:

(1) The meta-analysis presents original findings regarding the prevalence of depression and anxiety among patients with atrial fibrillation. The manuscript provides clear and valuable information for the two disorders.

Reply: Thank you for your careful reading.

(2) Please revise the citation style of the references in the manuscript, the citations should be sequentially superscripted in numerical format.

Reply: Thank you for your comment and we revised the citation style of the references in the manuscript.

(3) Please add PMID and DOI numbers to your references. They are available at: <http://doi.crossref.org/simpleTextQuery>. If there are no PMID or DOI numbers, please provide the website.

Reply: Thank you for your comment and we revised the citation style of the references in the manuscript.

(4) Please check and confirm whether the figures 2 and 3 are original (i.e. generated de novo by the author(s) for this paper). If the picture is 'original', the author needs to add the following copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2023.

Reply: The figures 2 and 3 are original and we added the copyright information to the bottom right-hand side of the picture in PowerPoint (PPT), named *89419-Image File*.

5 Language evaluation: Grade A. 6 Recommendation: Conditional acceptance.

Language Quality: Grade B (Minor language polishing)

Scientific Quality: Grade B (Very good)

[Reply: Thank you for your kind comments.](#)

(2) Company editor-in-chief:

I have reviewed the Peer-Review Report, full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Psychiatry, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. Before its final acceptance, please provide and upload the following important documents:

- 1. Biostatistics Review Certificate, a statement affirming that the statistical review of the study was performed by a biomedical statistician;**

Reply: We uploaded the 89419-Biostatistics Review Certificate in the system.

- 2. PRISMA 2009 Checklist, an important document related to manuscript writing of systematic review, meta-analysis, and scientometrics research.**

Reply: We uploaded the PRISMA 2009 Checklist in the system, named 89419-PRISMA 2009 Checklist.

- 3. The quality of the English language of the manuscript does not meet the requirements of the journal. Before final acceptance, it is recommended that the authors provide the English Language Certificate issued by a professional English language editing company. Please visit the following website for the professional English language editing companies we recommend: <https://www.wjgnet.com/bpg/gerinfo/240>.**

Reply: We polished the English language and uploaded the English Language Certificate, named 89419-Non-Native Speakers of English Editing Certificate.

- 4. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor.**

Reply: We provided the original figure documents using PPT, named 89419-Image File.

- 5. In order to respect and protect the author's intellectual property rights and prevent others from misappropriating figures without the author's**

authorization or abusing figures without indicating the source, we will indicate the author's copyright for figures originally generated by the author, and if the author has used a figure published elsewhere or that is copyrighted, the author needs to be authorized by the previous publisher or the copyright holder and/or indicate the reference source and copyrights. Please check and confirm whether the figures are original (i.e. generated de novo by the author(s) for this paper). If the picture is 'original', the author needs to add the following copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2023.

Reply: The figures 2 and 3 are original and we added the copyright information to the bottom right-hand side of the picture in PowerPoint (PPT), named *89419-Image File*.

- 6. Authors are required to provide standard three-line tables, that is, only the top line, bottom line, and column line are displayed, while other table lines are hidden. The contents of each cell in the table should conform to the editing specifications, and the lines of each row or column of the table should be aligned. Do not use carriage returns or spaces to replace lines or vertical lines and do not segment cell content.**

Reply: We have updated the table formats.

- 7. Please upload the approved grant application form(s) or funding agency copy of any approval document(s).**

Reply: We have updated the funding approval documents.

Response to the Review Comments

Reviewer #1:

Specific Comments to Authors:

Dear authors, I have only a few comments on your manuscript:

1. You should describe the pathogenesis of depression and anxiety in atrial fibrillation in a more detail.

Reply: We gratefully appreciate for your valuable suggestion and describes the pathogenesis of depression and anxiety in atrial fibrillation in a more detail in the DISCUSSION section (Manuscript Page 15-16 lines 296-317).

2. You should state which psychotropic medication is suitable for anxiety and depression in atrial fibrillation (i.e. in cardiovascular morbidity).

Reply: Thank you for your suggestion and we added the suitable psychotropic medication for anxiety and depression in atrial fibrillation (Manuscript Page 17 lines 324-337).

Reviewer #2:

Specific Comments to Authors:

1. Original Findings: The manuscript presents original findings regarding the prevalence of depression and anxiety among patients with atrial fibrillation (AF). Through a systematic review and meta-analysis of 26 studies, the authors found that the prevalence of depression and anxiety varied based on gender and region. This highlights the importance of considering these factors when implementing psychological interventions for AF patients.

Reply: Thank you so much for your careful reading and comments.

2. Quality and Importance: The manuscript demonstrates high quality in terms of adherence to the PRISMA 2020 statement and MOOSE guidelines. The study's importance lies in its contribution to the understanding of the global epidemiology of mental disorders in AF patients. By identifying prevalence rates, gender differences, and regional variations, the study adds valuable insights to the existing knowledge in this field.

Reply: Thank you so much for your careful reading and comments.

3. Limitations and Future Directions: While the manuscript provides valuable information, it is important to acknowledge some limitations.

3.1 One limitation is the inclusion of observational studies, which may introduce potential biases.

Reply: Thank you for your rigorous consideration. Due to the limitation of the type of included articles, we also performed publication bias and sensitivity analyses in the research, and we found that the included articles did have some publication bias. However, after sensitivity analyses, the conclusions were robust. Therefore, we mentioned this kind of limitation in the discussion section as well. Further large-sample clinical studies are needed to confirm the prevalence (Manuscript Page 18 lines 348-351).

3.2 Additionally, the manuscript could benefit from addressing the potential underlying mechanisms linking AF and mental disorders.

Reply: Thank you for your comments. We added the mechanisms linking AF and mental disorders in the DISCUSSION section (Manuscript Page 15-16 lines 296-317).

3.3 In terms of future directions, it would be beneficial for the authors to explore the impact of different treatment modalities on the prevalence of mental disorders in AF patients.

Reply: Thank you for your suggestion. We added treatments available for AF to treat depression and anxiety, as well as antidepressant and anxiolytic medications that can treat AF (Manuscript Page 17 lines 324-337).

3.4 Furthermore, investigating the longitudinal course of mental disorders in relation to AF could provide a deeper understanding of the relationship between these conditions.

Reply: Thank you for your kind advice. We added “*The mechanism of AF comorbidity with depression and anxiety can be elucidated using molecular biology and cellular immunology, which is another direction for future research.*” in the DISCUSSION section (Manuscript Page 18 lines 361-364).

4. Impact on Basic Science and Clinical Practice: This publication has the potential to impact both basic science and clinical practice. The findings contribute to the growing body of literature on the association between mental disorders and AF. The identification of gender and regional differences in prevalence rates can inform the development of tailored psychological interventions for AF patients. Furthermore, this study prompts further research into the underlying mechanisms and long-term outcomes of mental disorders in the context of AF. Overall, the manuscript presents valuable findings regarding the prevalence of mental disorders in AF patients. With some consideration of

the limitations and future directions suggested, this study has the potential to make a significant impact on both research and clinical practice in this field.

Reply: Thank you so much for your careful reading and comments.