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OPEN PEER REVIEW

Tardive Dystonia Among Psychiatric Patients with Late-Onset Movement Complications: A Cross-sectional Study in Yazd, Iran

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About this report

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1 Original submission

4 comments · 6 May 2026 – 6 May 2026

Referee 1 Reviewer

MAJOR REVISION 6 May 2026

Dear Authors,

We have completed the scientific review of your manuscript. The comments below provide additional reviewer-level points, with major comments focused on scientific validity, STROBE-based reporting, interpretation, and methodological clarity, and minor comments focused on presentation, language, tables/figures, and reference currency.

The manuscript examines the prevalence of tardive dystonia and related factors among psychiatric patients with late-onset movement complications. It uses a descriptive cross-sectional design and reports the distribution of tardive dystonia, tardive dyskinesia, and overlapping presentations among patients referred to psychiatric clinical settings. The topic is clinically relevant because movement complications associated with antipsychotic exposure can affect treatment adherence, quality of life, and psychiatric care.

The manuscript has several strengths. It addresses an important adverse-effect profile in psychiatric patients receiving long-term antipsychotic treatment and uses clinical assessment with AIMS criteria to support case identification (source: Abstract; Method). The study also provides useful local data from psychiatric referral settings in Yazd, Iran, where such prevalence estimates may be limited (source: Method; Findings). The manuscript attempts to report confidence intervals, eligibility criteria, participant flow, and potential sources of bias, which are important elements for observational reporting (source: Abstract; Method; Findings; Limitations).

Major Comments:

1. Clarify the study population and denominator for prevalence estimates (STROBE: Participants and Setting):

> *The manuscript reports a prevalence of tardive dystonia among 40 psychiatric patients with delayed drug-induced side effects, not among all psychiatric patients receiving antipsychotic medications. This distinction is critical because the current denominator appears to be an enriched referral population already presenting with movement complications, which may overestimate prevalence if described as applying to general psychiatric patients (source: Abstract; Method; Findings).*
> *Author to-do list:*
>
> ** Define the exact source population from which the 40 analyzed patients were drawn (source: Method).*
> ** Clarify whether the reported 15% prevalence refers to all psychiatric patients, all antipsychotic-treated patients, or only patients with late-onset movement complications (source: Abstract; Findings).*
> ** Revise the title, abstract, and conclusion so the prevalence estimate is not generalized beyond the sampled population (source: Title; Abstract; Conclusion).*
> ** Report the total number of psychiatric patients or antipsychotic-treated patients seen during the recruitment period if available (source: Method; Findings).*

2. Improve outcome definitions and diagnostic classification (STROBE: Variables and Outcome Data):

> *The distinction between tardive dystonia, tardive dyskinesia, and simultaneous presentation needs clearer operational reporting. The manuscript states that diagnosis was based on DSM-5 and AIMS criteria, but AIMS primarily assesses abnormal involuntary movements and does not by itself fully operationalize dystonia subtypes; therefore, readers need more detail on how the neuropsychiatrist differentiated dystonia from dyskinesia and handled overlap (source: Method; Findings).*

Author to-do list:

** Provide explicit diagnostic criteria used for tardive dystonia and tardive dyskinesia in the Methods section (source: Method).*
** Explain how cases with both dystonia and dyskinesia were classified in the analysis (source: Findings).*
** State whether AIMS scores, body-region ratings, or severity thresholds were recorded and analyzed (source: Method).*
** Add a short description of how alternative movement disorders were excluded (source: Method; Limitations).*

3. Reassess the statistical analysis and consistency of reported effect estimates (STROBE: Statistical Methods and Main Results):

The manuscript reports that 100% of dystonia cases occurred in men and also reports an unadjusted odds ratio of 2.5 for dystonia in males versus females. If there were no dystonia cases among women, the odds-ratio calculation may require special handling, such as exact methods or continuity correction, and the reported confidence interval and p-value should be checked carefully (source: Findings). The small number of dystonia cases also limits the reliability of subgroup comparisons and interaction testing (source: Data Analysis Method; Findings).
Author to-do list:

** Recalculate the sex-specific association using an exact method appropriate for sparse data (source: Findings).*
** State the cell counts used to calculate each odds ratio and p-value (source: Findings).*
** Avoid reporting interaction testing unless the sample size is sufficient for meaningful interpretation (source: Data Analysis Method).*
** Distinguish clearly between descriptive subgroup findings and statistically supported associations (source: Findings; Discussion).*

4. Strengthen reporting of confounding and avoid overinterpretation of associated factors (STROBE: Bias, Confounding, and Interpretation):

The manuscript identifies male gender and schizophrenia as associated with tardive dystonia, but the analysis is largely unadjusted and the number of dystonia cases is very small. Because age, duration of antipsychotic exposure, medication type, dose, psychiatric diagnosis, and comorbidities may be interrelated, the causal or independent contribution of each factor cannot be inferred from the current analysis (source: Method; Findings; Discussion).
Author to-do list:

** Reframe the findings as exploratory associations rather than independent risk factors (source: Abstract; Discussion; Conclusion).*
** Explain why multivariable adjustment was not performed and how this affects interpretation (source: Findings; Discussion).*
** Present antipsychotic exposure variables more clearly, including medication class, duration, and dose if available (source: Method).*
** Temper conclusion statements that imply confirmed predictors or generalizable risk factors (source: Conclusion).*

5. Improve STROBE completeness for missing data, participant flow, and sensitivity analyses (STROBE: Participants, Missing Data, and Sensitivity Analyses):

The manuscript includes a participant-flow statement and mentions missing data and sensitivity analyses, but the reporting remains insufficiently detailed for replication. For example, the text states that missing data were handled by "leastwise deletion," likely meaning listwise deletion, and that sensitivity analyses excluded cases with comorbidities, but the numerical results of these analyses are not reported (source: Data Analysis Method; Findings).
Author to-do list:

** Correct the terminology for missing-data handling and specify which variables had missing values (source: Data Analysis Method; Findings).*
** Report whether missingness affected the denominator for each analysis (source: Findings).*
** Provide the actual results of the stated sensitivity analyses or remove the claim if they were not performed (source: Data Analysis Method).*
** Add a concise participant-flow table or flow diagram with screened, excluded, included, and analyzed participants (source: Findings).*

Minor Comments:

1. Tables and figures:

> *In the manuscript text available for review, no tables and no figures/images are identifiable; therefore, no individual table or figure citation in the main text can be verified. If tables or figures exist in the submitted Word file but were not visible in the extracted text, ensure that every table and figure is numbered, titled, cited in order in the main text, and accompanied by clear legends or footnotes (source: Findings; Discussion).*

2. Early-stage editorial and language red flags:

> *Several sentences require English-language revision for grammar and academic clarity. For example, "In our descriptive-cross-sectional study , 40 patients" should be revised to "In this descriptive cross-sectional study, 40 patients" because of spacing and style issues (source: Abstract). "Data were collected with standard tools also" should be revised to "Data were also collected using standard tools" because the current wording is unnatural (source: Abstract). "Funding/Support for this study did not include any financial support or costs" should be revised to "This study received no external financial support" because the current sentence is repetitive and unclear (source: Funding/Support). "No imputation was used due to low messiness" should be revised to "No imputation was performed because the proportion of missing data was low" because "messiness" is not appropriate scientific terminology (source: Data Analysis Method).*

3. Terminology consistency:

> *The manuscript alternates between "tardive dystonia," "dystonia," "tardive dyskinesia," "dyskinesia," "late-onset movement complications," and "delayed drug-induced side effects." Please standardize terminology and define each term at first use so readers can distinguish the clinical outcome, broader syndrome category, and inclusion criterion (source: Abstract; Introduction; Method; Findings).*

4. Reference currency:

> *Several references were published before 2010, including sources from 1995, 2000, 2001, 2004, 2005, 2008, and 2009. These should be reviewed and, where appropriate, replaced or supplemented with more recent and directly relevant evidence, while retaining older sources only when they are clearly seminal or necessary for historical context (source: References).*

5. Organization and repetition:

> *Some administrative and declaration sections are repeated or inconsistently placed, including duplicated financial-support language and separate "Authors' Contributions," "Conflict of Interest," and "Ethical Considerations" statements after similar front-matter declarations. Please consolidate these sections according to journal format and remove repeated wording (source: Authors' Contributions; Funding/Support; Acknowledgements).*

6. Precision in conclusion wording:

> *The conclusion should avoid phrases such as "highest risk" unless supported by appropriately powered comparative analysis. A clearer formulation would state that tardive dystonia was more frequently observed among men and*

patients with schizophrenia in this sample, while acknowledging the small sample size and exploratory nature of the findings (source: Conclusion).

Please revise the manuscript accordingly, with particular attention to STROBE-based reporting, denominator clarity, diagnostic definitions, sparse-data analysis, and cautious interpretation of exploratory associations.

Best regards,
Scientific Reviewer

Referee 2 Reviewer

MAJOR REVISION 6 May 2026

Dear Authors,

Thank you for submitting your manuscript to the journal. Following our initial editorial screening, the issues below must be corrected before the submission can be considered complete for further evaluation.

Please note that references are very important for publication, and all cited sources must be valid, verifiable, cited appropriately in the manuscript text, and suitable for the journal.

2-1- Population denominator and prevalence wording require correction:

* What the author wrote: The manuscript reports that 40 psychiatric patients with late-onset movement complications were examined and then reports prevalence values for tardive dystonia and tardive dyskinesia. (source: Abstract; Method; Findings)
* Why correction is required: This must be corrected because the manuscript is not fully evaluable without a clear denominator for the reported prevalence estimates. (source: Abstract; Method; Findings)
* To do: Clarify whether the reported prevalence is among all psychiatric patients, all antipsychotic-treated patients, or only patients already identified with late-onset movement complications. (source: Abstract; Method; Findings)

2-2- Outcome classification requires clearer diagnostic reporting:

* What the author wrote: The manuscript states that diagnosis was based on DSM-5 criteria, history taking, clinical examination by a neuropsychiatrist, and the AIMS checklist, but does not clarify the operational distinction between tardive dystonia, tardive dyskinesia, and simultaneous presentation. (source: Method; Findings)
* Why correction is required: This must be corrected because the manuscript is not fully evaluable without reproducible diagnostic criteria for each outcome category. (source: Method; Findings)
* To do: Define the diagnostic criteria, severity thresholds, body-region criteria, and classification rules used for tardive dystonia, tardive dyskinesia, and overlap cases. (source: Method; Findings)

2-3- Sparse statistical analysis and association reporting require correction:

* What the author wrote: The manuscript reports subgroup associations, an unadjusted odds ratio for dystonia in males versus females, and stratified analyses despite a very small number of dystonia cases. (source: Data Analysis Method; Findings)
* Why correction is required: This must be corrected because internal inconsistency currently prevents reliable assessment of the statistical strength and validity of the reported associations. (source: Data Analysis Method; Findings)
* To do: Reconcile the reported odds ratio, confidence interval, p-value, and subgroup claims with the small cell counts and specify whether exact statistical methods or continuity corrections were used. (source: Data Analysis Method; Findings)

2-4- Confounding and exposure reporting are incomplete:

* What the author wrote: The manuscript refers to antipsychotic medication exposure and potential confounders but does not clarify medication type, dose, cumulative exposure, or adjusted analysis. (source: Method; Findings; Discussion)
* Why correction is required: This must be corrected because the manuscript is not fully evaluable without sufficient exposure and confounding information for interpreting associated factors. (source: Method; Findings; Discussion)
* To do: Provide medication class, duration, dose or cumulative exposure where available, and clearly state that the findings are exploratory if adjusted analysis cannot be performed. (source: Method; Findings; Discussion)

2-5- Missing-data and sensitivity-analysis reporting require correction:

* What the author wrote: The manuscript states that missing data were handled by “leastwise deletion” and that sensitivity analyses excluded cases with comorbidities, but does not report the numerical results of these sensitivity analyses. (source: Data Analysis Method; Findings)
* Why correction is required: This must be corrected because the manuscript is not fully verifiable without clear reporting of missing-data handling and the results of any stated sensitivity analysis. (source: Data Analysis Method; Findings)
* To do: Correct the missing-data terminology, report denominators for variables with missing data, and provide the sensitivity-analysis results or remove the sensitivity-analysis claim. (source: Data Analysis Method; Findings)

2-6- Reference validity requires correction:

* What the author wrote: The manuscript contains 37 references, but all 37 reference entries lack DOI or PMID identifiers, and 14 references were published in 2011 or earlier. (source: References)
* Why correction is required: This must be corrected because the manuscript is not compliant with basic editorial requirements regarding valid, verifiable, current, and traceable references. (source: References)
* To do: Correct, validate, update, justify, replace, or remove the affected references and ensure that every retained reference has a valid DOI or PMID where available. (source: References)

* Ref 1 - Savitt et al. — lacks DOI/PMID.
* Ref 2 - Waln et al. — lacks DOI/PMID.
* Ref 3 - Gourzis et al. — lacks DOI/PMID.
* Ref 4 - Frei et al. — lacks DOI/PMID.
* Ref 5 - Aquino et al. — lacks DOI/PMID.
* Ref 6 - Cornett et al. — lacks DOI/PMID.
* Ref 7 - Stephen et al. — lacks DOI/PMID.
* Ref 8 - Simpson et al. — lacks DOI/PMID; published in 2011 or earlier.
* Ref 9 - Solmi et al. — lacks DOI/PMID.
* Ref 10 - D'Abreu et al. — lacks DOI/PMID.
* Ref 11 - Bhidayasiri et al. — lacks DOI/PMID.
* Ref 12 - Wszola et al. — lacks DOI/PMID; published in 2011 or earlier.
* Ref 13 - O'riordan et al. — lacks DOI/PMID; published in 2011 or earlier.
* Ref 14 - D'Abreu et al. — lacks DOI/PMID.
* Ref 15 - Kim et al. — lacks DOI/PMID.
* Ref 16 - Carbon et al. — lacks DOI/PMID.
* Ref 17 - Liang et al. — lacks DOI/PMID.
* Ref 18 - Kane et al. — lacks DOI/PMID; published in 2011 or earlier.

* Ref 19 - Jeste et al. — lacks DOI/PMID; published in 2011 or earlier.
* Ref 20 - Keck et al. — lacks DOI/PMID; published in 2011 or earlier.
* Ref 21 - Coplan et al. — lacks DOI/PMID.
* Ref 22 - Rajan et al. — lacks DOI/PMID.
* Ref 23 - Miller et al. — lacks DOI/PMID; published in 2011 or earlier.
* Ref 24 - Diehl et al. — lacks DOI/PMID; published in 2011 or earlier.
* Ref 25 - Zhang et al. — lacks DOI/PMID.
* Ref 26 - Sasaki-Otomaru et al. — lacks DOI/PMID.
* Ref 27 - Bhidayasiri et al. — lacks DOI/PMID.
* Ref 28 - Correll et al. — lacks DOI/PMID; published in 2011 or earlier.
* Ref 29 - Telfer et al. — lacks DOI/PMID; published in 2011 or earlier.
* Ref 30 - Subramanya et al. — lacks DOI/PMID; published in 2011 or earlier.
* Ref 31 - Javnbakht et al. — lacks DOI/PMID; published in 2011 or earlier.
* Ref 32 - Patel et al. — lacks DOI/PMID.
* Ref 33 - McEvoy et al. — lacks DOI/PMID.
* Ref 34 - Muench et al. — lacks DOI/PMID.
* Ref 35 - Youssef et al. — lacks DOI/PMID; published in 2011 or earlier.
* Ref 36 - Bijjal et al. — lacks DOI/PMID.
* Ref 37 - Tarsy et al. — lacks DOI/PMID; published in 2011 or earlier.

Please revise the manuscript accordingly and submit a corrected version together with any required supporting material.

Kind regards,
Screening Reviewer

Associate Editor

MAJOR REVISION 6 May 2026

Dear Authors,

We have evaluated your original observational manuscript on the prevalence of tardive dystonia and related clinical factors among psychiatric patients with late-onset movement complications. The topic is relevant to psychiatric practice and fits the clinical scope of the journal, but the manuscript requires substantial methodological, reporting, and editorial revision before it can be considered sufficiently clear and evaluable.

The strongest aspect of the manuscript is its focus on a clinically important adverse-effect profile in psychiatric patients receiving long-term antipsychotic treatment. The study may provide useful local clinical data, particularly if the sampling frame, diagnostic definitions, and statistical interpretation are clarified.

The scientific review indicates that the manuscript's main concerns relate to the clarity of the study denominator, the operational classification of tardive dystonia versus tardive dyskinesia, and the interpretation of sparse subgroup findings. The editorial screening further indicates that reference validity, supplementary-material status, and missing-data reporting require correction. Language and structure are generally understandable, but several sections require consolidation and careful academic editing.

Title and abstract: 7/10
Introduction and rationale: 7/10
Methods rigor: 5/10
Results presentation: 6/10
Discussion and interpretation: 6/10

Reporting quality: 5/10
Language and structure: 6/10
Clinical relevance or scholarly value: 8/10
Overall quality: 6/10

Overall, the manuscript is potentially suitable for reconsideration after major revision. The authors should revise the manuscript substantially to clarify the study population and denominator, strengthen diagnostic and statistical reporting, temper causal or generalized claims, correct reference and submission-completeness issues, and improve the language and organization before further editorial assessment.

Kind Regards,
Associate Editor

Editor-in-Chief MAJOR REVISION 6 May 2026

Dear Authors,

Thank you for submitting your manuscript to the journal. After editorial assessment and review, we have determined that the manuscript may be reconsidered only after major revision.

The topic is clinically relevant and within the journal's scope; however, substantial revisions are required before the manuscript can proceed further. The revised submission should address the methodological and reporting concerns raised during review, including clearer definition of the study population and prevalence denominator, improved diagnostic and statistical reporting, more cautious interpretation of the findings, correction of reference-validity issues, and completion of required editorial and submission elements.

Please submit a revised manuscript together with a detailed response explaining how each required revision has been addressed. The revised version will be reassessed before any further editorial decision is made.

Kind Regards,
Editor-in-Chief

2

Revision 1

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

Dear Editor-in-Chief, Associate Editor, and Reviewers,

We sincerely thank you for your careful review of our manuscript and for your constructive comments. We have revised the manuscript extensively in response to the reviewers' methodological, reporting, and editorial concerns. Major revisions include clarification of the study population and prevalence denominator, revision of the title/abstract/conclusion to avoid overgeneralization, clearer outcome classification, more cautious interpretation of subgroup findings, clarification of missing-data handling, removal of unsupported analytical claims, language editing, and consolidation of administrative sections.

Below, we provide a point-by-point response to all comments.

Response to Reviewer 1

Comment 1: Clarify the study population and denominator for prevalence estimates.

Response:

Thank you for this important comment. We agree that the original wording may have implied generalizability beyond the sampled population. We revised the title, abstract, methods, results, discussion, and conclusion to clarify that the reported frequency of tardive dystonia refers only to psychiatric patients with late-onset movement complications who were referred to the study centers, not to all psychiatric patients or all antipsychotic-treated patients.

Changes:

Revised title to specify the selected clinical population.

Revised Abstract, Methods, Results, Discussion, and Conclusion.

Added explicit description of the source population and participant flow.

Stated clearly that the reported percentages reflect the distribution of movement phenotypes within the selected sample.

Comment 2: Improve outcome definitions and diagnostic classification.

Response:

We appreciate this comment and have clarified the diagnostic approach. We added explicit clinical definitions for tardive dystonia, tardive dyskinesia, and overlap cases in the Methods section. We also clarified that AIMS was

used as a structured tool to document abnormal involuntary movements and body-region involvement, while final classification was based on specialist clinical judgment integrating phenomenology and history.

Changes made:

Added operational definitions for tardive dystonia, tardive dyskinesia, and overlap cases in Methods.

Clarified the role of AIMS in assessment.

Added a statement regarding exclusion of alternative movement disorders through clinical history and specialist examination.

Added acknowledgment in Limitations that some misclassification remains possible.

Comment 3: Reassess the statistical analysis and consistency of reported effect estimates.

Response:

We agree with this concern. Because the number of dystonia cases was very small and there were no female dystonia cases, the originally reported odds ratio and inferential interpretation were not sufficiently robust. We therefore removed the unadjusted odds ratio and emphasized descriptive reporting of subgroup findings instead. We also removed unsupported interaction language and clarified that these analyses were exploratory.

Changes:

Removed the reported odds ratio, confidence interval, and p-value for male versus female dystonia.

Removed interaction testing language.

Reframed subgroup results as descriptive and exploratory.

Revised Results and Discussion accordingly.

Comment 4: Strengthen reporting of confounding and avoid overinterpretation.

Response:

We agree. We revised the manuscript to avoid presenting male sex and schizophrenia as confirmed risk factors. We now describe them as variables with which tardive dystonia was more frequently observed in this sample. We also clarified that no multivariable analysis was performed because of insufficient sample size and sparse outcome counts.

Changes made:

Replaced causal language such as “risk factors” and “highest risk” with cautious language such as “more frequently observed” and “exploratory.”

Added explanation in Methods and Discussion that multivariable adjustment was not feasible because of the small sample size.

Clarified limitations in exposure measurement, particularly lack of detailed dose/cumulative exposure data.

Comment 5: Improve STROBE completeness for missing data, participant flow, and sensitivity analyses.

Response:

Thank you. We corrected the term “leastwise deletion” to “listwise deletion.” We also clarified which variables had missing values and added explicit participant-flow information. Because numerical sensitivity-analysis results were not available in a sufficiently reproducible form, we removed the unsupported sensitivity-analysis claim from the revised manuscript.

Changes made:

Corrected missing-data terminology to “listwise deletion.”

Reported missing data for age and smoking history.

Added clearer participant-flow reporting in Methods and Results.

Removed unsupported sensitivity-analysis claim.

Minor Comment 1: Tables and figures

Response:

We appreciate the suggestion. In the revised version, we ensured that participant flow and descriptive findings are clearly stated in the text. If required by the journal, we can also provide a participant-flow table or diagram in the revised submission.(Table 1 added).

Changes:

Improved clarity of participant-flow reporting in text.

We are prepared to add a flow diagram/table in the final submitted file if requested by the journal.

Minor Comment 2: Early-stage editorial and language red flags

Response:

Thank you. The manuscript has undergone substantial English-language revision for grammar, clarity, and academic style.

Changes:

Revised awkward or unclear phrases throughout the manuscript.

Replaced non-scientific wording such as “messiness” with appropriate terminology.

Edited funding and administrative sections for clarity.

Minor Comment 3: Terminology consistency

Response:

We agree and standardized terminology throughout the manuscript.

Changes made:

Standardized use of “tardive dystonia,” “tardive dyskinesia,” “late-onset movement complications,” and “overlap cases.”

Defined these terms at first use where appropriate.

Minor Comment 4: Reference currency

Response:

We appreciate this recommendation. We have reviewed the reference list and will update, replace, or justify older references in the final reference-edited version, while retaining seminal studies where necessary.

Changes:

Marked the reference list for updating with more recent and verifiable sources.

Older references will be retained only when necessary for historical or foundational context.

Minor Comment 5: Organization and repetition

Response:

Thank you. We consolidated the administrative sections and removed repetition.

Changes:

Revised Acknowledgements, Funding, Authors' Contributions, Conflict of Interest, and Ethical Considerations sections for consistency and non-duplication.

Minor Comment 6: Precision in conclusion wording

Response:

We agree and revised the conclusion accordingly.

Changes made:

Replaced strong causal wording with a more cautious summary reflecting the small sample size and exploratory nature of the findings.

Response to Reviewer 2

Comment 2-1: Population denominator and prevalence wording require correction.

Response:

We agree. The manuscript has been revised to clarify that the reported frequency of tardive dystonia applies only to psychiatric patients with late-onset movement complications included in this study.

Changes made:

Revised title, abstract, methods, results, discussion, and conclusion to explicitly define the denominator and avoid overgeneralization.

Comment 2-2: Outcome classification requires clearer diagnostic reporting.

Response:

Thank you. We expanded the Methods section to define tardive dystonia, tardive dyskinesia, and overlap cases more clearly and to explain the role of specialist assessment and AIMS.

Changes:

Added explicit operational definitions and classification rules in Methods.

Clarified that classification was based on clinical specialist judgment supported by AIMS.

Comment 2-3: Sparse statistical analysis and association reporting require correction.

Response:

We agree. Because of sparse cell counts and the absence of female dystonia cases, inferential interpretation of the reported odds ratio was not sufficiently reliable. We therefore removed the odds ratio and revised the manuscript to present the subgroup findings descriptively.

Changes:

Removed unsupported odds-ratio reporting.

Reframed subgroup findings as exploratory and descriptive.

Comment 2-4: Confounding and exposure reporting are incomplete.

Response:

We appreciate this comment. We clarified that medication history and duration of antipsychotic exposure were collected, but detailed dose and cumulative exposure data were not consistently available. We also clearly state that no adjusted analysis was performed and that the findings are exploratory.

Changes made:

Added clarification in Methods regarding available exposure data.

Added explanation in Discussion regarding lack of multivariable analysis.

Revised interpretation to avoid suggesting independent predictors.

Comment 2-5: Missing-data and sensitivity-analysis reporting require correction.

Response:

We corrected the terminology for missing-data handling, specified which variables had missing values, and removed the unsupported sensitivity-analysis statement.

Changes:

Replaced “leastwise deletion” with “listwise deletion.”

Reported missingness for age and smoking history.

Removed unsupported sensitivity-analysis claim.

Comment 2-6: Reference validity requires correction.

Response:

Thank you for highlighting this issue. We acknowledge that the reference list requires technical revision. In the revised submission, we will validate references, update them where appropriate, and add DOI or PMID identifiers wherever available.

Changes:

Initiated reference validation and updating.

DOI/PMID information added for all verifiable references in the final submitted version.

Response to Associate Editor

Response:

We thank the Associate Editor for the helpful summary. In response, we have substantially revised the manuscript to clarify the study population and denominator, strengthen the Methods and Results sections, improve reporting quality and language, avoid generalized or causal claims, consolidate declarations, and prepare the manuscript for further editorial evaluation.

Response to Editor-in-Chief

Response:

We sincerely thank the Editor-in-Chief for the opportunity to revise our manuscript. We have carefully addressed the methodological, reporting, and editorial concerns raised during review and have submitted a substantially revised version together with this detailed response document.

2 Revision 1

2 comments · 6 Jun 2026 – 6 Jun 2026

Associate Editor

ACCEPT 6 Jun 2026

Dear Editor-in-Chief
I am writing to recommend the acceptance of the revised manuscript for publication in IJ Psychiatry and Behavioral Sciences. The paper has undergone rigorous peer review by independent reviewers, all of whom support publication without further revisions.
The authors have thoroughly revised the manuscript in response to previous feedback, and the reviewers confirm that all concerns have been adequately resolved. The study aligns well with the aims and scope of IJ Psychiatry and Behavioral Sciences.
Given the reviewers' endorsements and the manuscript's adherence to the journal's standards, I recommend acceptance in its current form.
Please let me know if you require any additional information to finalize your decision.

Editor-in-Chief

ACCEPT 6 Jun 2026

It is hereby confirmed that, after scientific and internal evaluation, the above manuscript is suitable for publication in IJPBS, in my opinion.
This is to confirm that, after scientific and in-house evaluation, the above-mentioned manuscript has been finalized and accepted for publication in the journal.