



Scientific Review Report

The future of high-impact publication is here

[Prepared by our Peer Reviewer, Senior Science Editor, and Managing Editor]



The image above is for representational purposes only.

Summary

Your manuscript describes a retrospective study of patient records regarding the epidemiology of head injury in Aseer region in the Kingdom of Saudi Arabi. You provide percentages for causes, treatments, and outcomes for head injuries from this dataset.

Your abstract contains background information, a good description of the design of your study, and some descriptive demographic information from your dataset. It could be improved by removing unnecessary background information, describing your statistical results in more detail, and providing a concluding statement that acts as a direct and scientifically appropriate interpretation of your results.

The background information provided in your Introduction provides data regarding head injuries and motor vehicle collisions in multiple different nations from previously published studies. However, very few of your cited studies were published within the past five years. For this reason, a peer reviewer may be concerned that the rationale for your study is not based on the most recent understanding of the subject found within the scientific literature. Furthermore, while the objective of your study is clearly stated, the novelty and potential impact of your study is not clear. How will your study add to previously published large scale analyses performed in the Kingdom of Saudi Arabia? Is there a particular importance to the years studied?

Your methods are brief, but appear to describe the study design. Please clarify whether any exclusion criteria were used, such as complicating diagnoses or patient characteristics. Furthermore, it is necessary to include a statement regarding ethical approval for the use of the patient data within a scientific study. Was written, informed consent obtained from patients? Was a requirement for consent waived by your institutional review board due to the lack of patient-identifiable information and the retrospective nature of the study? Finally, please describe your statistical tests in more detail and justify the choice of test made.

Your narrative results contain a large amount of unnecessary repetition which can be removed in order to improve ease of reading. Consider only reiterating important findings within your narrative results and referencing the included tables for the complete data. Also, carefully consider the number of significant digits that are appropriate to report variables such as age. Was age recorded to more precision than an individual year, and thus should you report years to decimals when averaged? Please describe throughout your results which statistical tests were used for each comparison reported.

Within your Discussion, please be certain that you fully interpret your data within the context of previously published studies that you have cited. If you cite specific data from a study, please ensure that you compare it with your own data and fully describe any differences in study design and methodology that may explain differences

between outcomes. You have described briefly some of your study limitations, but please note that additional limitations exist, such as your inability to compare data before and after implementation of new speeding rules, due to the limited chronology of the data that you collected. Furthermore, some of the speculative statements in your Conclusion are likely to be considered unjustified by a peer reviewer.

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1. Major issues (likely to be raised by the journal peer reviewer and cause rejection) and corresponding next steps the author should take.

Please consider describing in more detail the novelty and potential impact of your study within the abstract and Introduction, so that the peer reviewer has a clear understanding of how your study improves upon the data already present in the scientific literature.

Please provide more quantified data and statistical results within your abstract so that it can be read, understood, and interpreted independently of your full manuscript.

Please consider the importance of using the most recently published studies as background information in your Introduction so that the peer reviewer is certain that the rationale for your study is based on the most recent understanding of the problem within the scientific literature.

Please describe in more detail the statistical tests used, such as the type of t test performed, and justify the choice of your statistical tests by describing the data tested. When reporting p-values, because you have used multiple statistical methods, please report the type of test used for each comparison made.

Your concluding statements should be a direct interpretation of your data. I would recommend removing them and mentioning the implications/significance of your current study findings.

2. Minor issues (likely to be raised by the journal peer reviewer for consideration but not cause rejection) and corresponding next steps the author should take.

Please include a required ethical compliance statement within your Method section describing the collection of written, informed consent from the included patients. Alternatively, please describe the waiving by your institutional review board of the need for informed consent due to the lack of patient-identifiable information and the retrospective nature of the study.

In your Discussion, please fully interpret your results within the context of the literature you have cited, noting discrepancies where they may exist and explaining the differences in study design and methodology used as appropriate.

3. Does the paper present novel ideas/a novel direction with regard to the field of research?

The novelty of this study is described in brief the manuscript. However, this will need to be elaborated in the Introduction as well. The novelty of the study can be linked with the reason for conducting the study.

4. Does the paper present novel ideas or build on the research published in the target journal?

The target journal does not appear to have previously reported epidemiological studies of head injury.

5. Is the research rationale sound? (is the reason for conducting the research explained clearly in the paper?)

The rationale for performing this research is not clearly described in the Introduction. Please clarify how your study improve patient care, impact public policy, or improve our understanding beyond that already available in the scientific literature.

6. Is the literature review complete and which other papers can the author cite?

The literature review can be improved by citing references that have been more recently published, so that it is clear that your study rationale is based on the most recent understanding in the scientific literature. Consider whether providing the following additional, recently published citations would benefit your research rationale and background information of your manuscript:

- Crankson SJ. Motor vehicle injuries in childhood: a hospital-based study in Saudi Arabia. *Pediatr Surg Int*. 2006 Aug;22(8):641-5. doi: 10.1007/s00383-006-1715-7. Epub 2006 Jul 8. PMID: 16830162.
- Ullah S, Bin Ayaz S, Moukais IS, Qureshi AZ, Alumri T, Wani TA, Aldajani AA. Factors affecting functional outcomes of traumatic brain injury rehabilitation at a rehabilitation facility in Saudi Arabia. *Neurosciences (Riyadh)*. 2020 Jul;25(3):169-175. doi: 10.17712/nsj.2020.3.20190097. PMID: 32683395.
- Bateman RM, et al. 36th International Symposium on Intensive Care and Emergency Medicine : Brussels, Belgium. 15-18 March 2016. *Crit Care*. 2016 Apr 20;20(Suppl 2):94. doi: 10.1186/s13054-016-1208-6. Erratum in: *Crit Care*. 2016 Oct 24;20:347. PMID: 27885969; PMCID: PMC5493079.
- Alghnam S, AlSayyari A, Albabtain I, Aldebasi B, Alkelya M. Long-term disabilities after traumatic head injury (THI): a retrospective analysis from a large level-I trauma center in Saudi Arabia. *Inj Epidemiol*. 2017 Nov 1;4(1):29. doi: 10.1186/s40621-017-0126-7. PMID: 29090361; PMCID: PMC5663989.

7. Are the research implications clearly mentioned? If they are mentioned, are they sound? If they are not mentioned, what tips should the author follow?

The impact of your study is not clearly described. Please clarify how your study will affect public health policy or improve patient care.

8. Are the concluding statements clear, and do they mention the contributions, limitations, and next steps for other researchers in the field?

The limitations are discussed only briefly and are not comprehensive. The concluding statements contain suppositions regarding traffic laws that are not based on a direct or scientifically appropriate interpretation of the data due to a lack of comparisons across time or region.

9. Is the research design appropriate? What are the gaps, and what should be done to fill the gaps?

The design of the study as a retrospective, observational study is clear. Consider whether expanding the time range will give you additional data that can be used to compare before and after changes to speeding rules were introduced. This would provide additional opportunity for statistical comparison and increase the impact of your study.

10. Is the research methodology sound and relevant to the field?

The methods could be improved upon by describing whether additional exclusion factors were used.

11. Does the data appear accurate, and has it been interpreted appropriately? Flag cases of insufficient or insignificant data with the author.

The data are presented in Figure and Table format. Unnecessary repetition of data in narrative format should be reduced to improve ease of reading.

12. Should the author get their data verified by a statistician or submit analyzed datasets to the journal?

Consultation with an independent statistician is always encouraged. Please clarify the statistical tests that you performed and your justifications for choosing those tests. Please clarify throughout your manuscript which statistical tests are being used to obtain the results described for each comparison made.

13. Does the journal accept this article type?

The target journal accepts Original Research articles, and does not mention any restrictions against retrospective, purely observational studies such as your own.

14. Does the research in this article lie within the target journal's scope?

The target journal does not appear to have an aim that includes publishing epidemiological and public health studies, but rather focuses on biological processes of disease. The aim of the target journal is "to publish original research, review articles and short communications about molecular and cellular processes in disease, in order to increase understanding of the

fundamental principles and biological questions of medicine.” Please carefully consider whether your study conforms to the aims of your selected target journal.

Senior Science Editor's Comments on Language and Paper Structure

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1. How was the paper's overall language quality prior to editing?

The title was appropriate and only required minor improvements. The abstract required major improvements for language. The main body also required major improvements to address issues with grammar, consistency, clarity, sentence structure, and an appropriate tone.

2. What were the top 3 recurring grammar and language issues found and edited for native tone?

1. Wordiness (the use of many words to convey an idea) should be avoided in academic writing. The use of too many words to convey one idea can muddle the message and divert the reader's attention. Therefore, in writing, especially academic writing, ideas need to be conveyed as concisely as possible. One way of doing this is to use concise alternatives to phrases.

Original: To determine the epidemiological aspects of patients with head injury (HI) in Aseer Central Hospital (ACH). Materials and Methods. This is a retrospective cross-sectional study.

Edited: This retrospective cross-sectional study aimed to determine the epidemiological characteristics and outcomes of patients with head injury treated at Aseer Central Hospital (ACH).

2. Redundancy, that is, the unnecessary repetition of words or ideas, should be avoided in academic writing. In academic writing, ideas need to be conveyed as concisely as possible and redundant expressions should be avoided.

Original: Data were gathered from patients' files and the registrar's database of ACH. The study duration was January 2015–December 2017.

Edited: Data were collected from patient files and the registrar's database of ACH between January 2015 and December 2017.

3. Figures and tables should be referred to in the present tense. In academic writing, different tenses are used for different sections of the paper. For example, experiments are typically described in the past tense because the experiments were carried out in the past. However, generally accepted facts are written in the present tense.

Original: Figure 2 depicted that 34%

Edited: Figure 2 shows that 34%

3. Does the paper adhere to the target journal's language preference?

The target journal allows the use of either American or British English.

4. Do the main ideas in the paper flow well? Was the flow of ideas/the main argument natural?

The main ideas generally flow well. However, there were a few issues with flow that have been addressed.

5. What types of changes were made for improvements to paper flow and how has the paper's readability improved because of these?

Some repetitive or unnecessary sentences that disrupt the flow have been flagged through comments. Moreover, additional changes have been introduced directly or suggested through comments to ensure proper structure and flow of ideas.

6. Does the target journal have a word count limit, and does the paper adhere to this limit after editing?

A word limit is only stipulated for the abstract and has been met.

7. List out all the author preferences and instructions that could not be followed and why.

N/A

8. What were the major formatting requirements of the journal for this paper, and what changes have been made to meet these requirements?

The journal requires the use of a provided template. The manuscript has been transferred to the template. Missing information has been highlighted in yellow and should be inserted before the manuscript is submitted to the journal. The target journal describes a Graphical Abstract which is presented alongside the written abstract. It is unclear whether this is required or optional. You may choose to contact the journal editor to inquire about this prior to submission. Please use the Tables function of MS Word to create your tables, instead of submitting them as graphical images.

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1. What details or documents are missing in the paper submission package based on the target journal's formatting and submission requirements?

According to the instructions, all figures should also be submitted in in a single zip archive and at a sufficiently high resolution. Optionally, the authors may also provide biographies and a graphical abstract (the instructions for these have been provided in the manuscript). Declarations regarding conflicts of interest can also be collected via the [MDPI disclosure form](#).

2. Does the paper need to be split for submission?

The paper does not need to be split for submission.

3. Does the paper need to be blinded for review, and has it been blinded?

The paper does not need to be blinded for review.

4. Have all the formatting guidelines, including the right file format for submission, been addressed? Mention any that have not and why they have not been addressed.

The manuscript has been prepared in an appropriate file format for submission. Missing elements regarding the journal's formatting guidelines have been flagged.

5. Have ethical and financial declarations been provided? If not, alert the author to do so and explain why.

Ethical and financial declarations have not been provided and are required by the journal. Please refer to the relevant sections in the template highlighted in yellow.

6. Is a conflict of interest statement provided? If not, alert the author to do so and explain why.

A conflict of interest statement has not been provided and is required by the journal. Please refer to the relevant section in the template highlighted in yellow.

7. Has a data availability statement been provided? If not, alert the author to do so and explain why.

A data availability statement has not been provided and is required by the journal. Please refer to the relevant section in the template highlighted in yellow.

8. Has the corresponding author been identified for journal interaction?

The corresponding author has not been identified. Identifying the corresponding author is required by the journal.

9. Are all the references, tables, and figures present?

References, tables, and figures were not within the scope of the edit. They have been cited in the main text.

10. Are the references in the right format and the figures and tables labelled appropriately?

The references, tables, and figures were excluded from the edit. Instructions regarding their format have been provided in the main file.