

Manuscript number: 87025, Retrospective Study

Article Title: Clinical Factors Predicting Rotavirus Diarrhea in Children: A Cross-Sectional Study from Two Hospitals

World Journal of Clinical Pediatrics

Author's Response:

We thank the reviewers for their time and expertise. Please see the specific response to the reviewers enclosed below.

Reviewers' comments:

Reviewer #1: Title: reads well There are some grammatical errors. Pls rectify Abstract:

Response: Thank you for your essential concern. As for the title, we have consulted an English native as well as Grammarly and we could not find any grammatical errors in the title. However, if the reviewer has specific concerns, please address it so we can rectify it accordingly.

Comment: Conclusion is generalized. Pls be specific for the findings of the study. What is the specificity, sensitivity and accuracy of rotavirus prediction with these criteria?

Response: Thank you for pointing this out. We have changed it to be more specific in the abstract section by replacing it with:

“Wet season, LOS ≥ 3 days, presence of abdominal pain, severe dehydration, abnormal white blood cell counts, abnormal random blood glucose and presence of fecal leukocytes predict rotavirus diarrhea.”

In the results section, we have also added the AUC as follows:

“The AUC for this model is 0.819 (95% CI= 0.746-0.878, p-value <0.001), which shows that this model has good discrimination.”

Comment: Intro: purpose clearly mentioned

Response: Thank you for the review.

Comment: Methodology: Elaborately discussed No major changes

Response: Thank you for the review.

Comment: Results: Pls discuss the specificity, sensitivity and accuracy of rotavirus prediction with these criteria

Response: Thank you for the review. However, since our study is not focused on creating a new scoring system, we are afraid that we cannot statistically calculate the specificity, sensitivity, and accuracy of our prediction. Instead, we offer an AUC value which states how much it discriminates between the diseased (rotavirus diarrhea) and non-diseased (non-rotavirus diarrhea).

Comment: Discussion: Can be presented under separate subheadings for easier understanding Pls discuss the need for the current study Pls elaborate the evidence in the existing literature on this subject

Response: Thank you for the review. We have presented separate subheadings and the need for current study is elaborated in the first paragraph of the discussion, as well as the introduction. The evidence of existing literature was discussed extensively in the following paragraph.

Reviewer #2: The study results highlight several important findings that contribute to our understanding of predictive factors for rotavirus gastroenteritis. The identified predictors include wet season, length of stay (LOS) ≥ 3 days, presence of abdominal pain, severe dehydration, abnormal white blood cell counts, abnormal random blood glucose, and presence of fecal leukocytes. These factors provide valuable insights into distinguishing between rotavirus and non-rotavirus gastroenteritis cases. The study's strengths lie in its comprehensive approach, involving both clinical and laboratory data, to identify potential predictive factors for rotavirus gastroenteritis. The multivariate analysis enhances the robustness of the findings by accounting for confounding variables. Furthermore, the inclusion of a diverse age range of pediatric patients enhances the generalizability of the study's conclusions.

Response: Thank you for your valuable time and input in reviewing our manuscript.

Comment: However, I have a few suggestions to improve the manuscript: 1. The abstract lacks information about the sample size calculation and the rationale for selecting the specific predictors examined in the study. Adding a brief explanation of the theoretical basis for selecting these predictors would enhance the context of the research.

Response: Thank you for your valuable insight. We have added the sample size calculation and as for the theoretical basis, as it will mean that an extensive literature review for each variable is required, we simply decided to address it in one sentence with the references included. We decided to put this information in our methods section as our abstract is already more than 250 words. I hope for your kind understanding.

2. The conclusion could benefit from discussing the clinical implications of the identified predictors. How might these findings aid clinicians in their decision-making process? Addressing this question would add practical value to the study's implications.

Response: Thank you for your astute comment. We have added the conclusion by saying

“Clinicians may use these parameters to further alert them to the possibility of rotavirus diarrhea in children and order tests more prudently as well as prescribing appropriate therapy.”

3. The study period spans four years, and there may have been changes in diagnostic and treatment practices during this time. A brief discussion about the potential impact of temporal variations on the study's findings would strengthen the interpretation of the results.

Response: Thank you for such a great insight. We have added this statement in the limitation as follows:

“Third, we could not account for any temporal changes occurring in the four years of the study period. Any seasonality, changes in guidelines and diagnosis of rotavirus diarrhea, as well as immunization update may have altered the results of the study.”

Overall, the article presents valuable insights into predictive factors for rotavirus gastroenteritis in pediatric patients. Including the suggestions mentioned above, the article would contribute significantly to the understanding of rotavirus diagnosis and clinical management in the pediatric population. I recommend the acceptance of the article pending minor revisions mentioned.

Reponse: Thank you very much for your kind words.

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 Clinical Pediatrics, 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. 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. 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. 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.

Reponse: Thank you very much for your kind words. We have adjusted the table and attach our figure in a powerpoint. Thank you.