

BSMMUJ-68428

Association of vitamin D level with systemic lupus erythematosus: A case-control study

Saha M. et. Al

Type of the review: Anonymous Reviewer/Disclosed Author

MECHANICAL EDITING

27 August 2023

Comment 1

Abstract: Please use the subheadings as per the Journal's style.

- 'Background' instead of 'Introduction'
- No separate heading for objectives
- Only 'Methods' instead of 'Materials and Methods'

Response

The change has been made as per the journal style.

Comment 2

List all authors. Ensure that all references follow the Vancouver style

Response

I rechecked and corrected all references in Vancouver style. Remove et al. and list all authors.

Comment 3

Take the 'Limitation' before the 'Conclusion'. No bullet point for the limitation.

Response

The limitation is given before the conclusion.

Comments 4

Summarize key points in a maximum of 5 bullet points under the 'Highlights' section.

Response

Highlights have been added

Comments 5

Table I has two headings.

Response

The heading of Table 1 has been revised.

Comments 6

The results section does not have enough text to explain the tables and figures.

Response

The results has been revised.

TECHNICAL EDITING

Round 1

1 October 2023

Reviewer's comments

Comment 1

The title lacks an indication of population, place of data collection, and study design.

Response

Corrected

Comment 2

The methods section needs rewriting to include essential components and structuring.

Response

Method section re-writing done with a major correction

Comment 3

The results section needs to be written

Response

The result section is written fully

Comment 4

The conclusion needs to be to the point.

Response

The conclusion was given according to the instructions given

Comment 5

The abstract can be elaborated up to 250 words to include pertinent issues in the methods and results section.

Response

Done

Comment 6

Formatting issues (text, tables, and figure) needs to be addressed.

Response

Done

Comment 7

Strengths need to be addressed

Response

Done

Round 2
17 October 2023

Executive editor's comments

Comment 1

Methods: Lines 136-139 should be written in descriptive terms without subheadings.

Response

All subheadings are erased.

Comment 2

Avoid small paragraphs in the results section: lines 186--203.

Response

All are compiled with individual paragraphs.

Comment 3

Discussion: Minimize repetition of results here. We should discuss the findings here, not repeat the results.

Response

All repetitions are erased.

Comment 4

Acknowledgment: Line 308: valuable advice on publication is not understandable.

Response

Review of Manuscript written and advice on publication omitted.

Comment 5

Table 1: The < sign for p values is not correct. I guess it should be 0.042 in place of <0.042. Please check. Age groups 31-40 and 41-50 have 6 persons each. These two groups could be merged. Similarly, no education and HSC have very small numbers to analyze. Kindly divide the subjects into two groups for a meaningful analysis. I do not see any definition of classifying your subjects into three categories in the table or the Methods section. Using Kruskal-Wallis for two groups (cases and controls) is inappropriate.

Response

All < sign for p value omitted. Age groups 31-40 and 41-50 have been combined with a single group named >30. The education group is divided into two subgroups. Abbreviation and Classification are given in the footnote. Kruskal-Wallis for two groups (cases and controls) removed with Mann-Whitney U.

Comment 6

Table 2: Please take the first component (deficient, insufficient, normal) to the Table number 1. Please prepare Table 2 using 30 ng/ml cutoff point. Add confidence interval to the OR.

Response

Two separate tables are plotted, named Table 2 and Table 3, respectively.

Comment 7

Table 3: The < sign for values is probably wrong. Double-check it.

Response

sign < omitted

Comment 8

Table 4: The numbers here are not mutually exclusive. For example, patients with joint disease have pyrexia of unknown origin (PUO) or vice versa. Therefore, reporting their mean vitamin D levels here is not justified because of the overlaps. I suggest dropping Table 4.

Response

Table 4 is dropped, and minimum data was inputted in the Fig-1

Comment 9

Table 5: I suggest keeping variables that have both cases and controls (n=100, including those having a few missing values). Provide the full name of the variables.

Response

N- 100 are for both groups. SLEDAI, Disease duration and Anti ds DNA are only seen in the case group. As this is vital data, it is mentioned in the table. This table summarizes all the correlation curves done by Pearson Correlation curve.

Round 3
19 October 2023

Executive editor's comments

Comment 1

Title: We suggest using "**Association of vitamin D level with systemic lupus erythematosus disease activity: A case-control study.**"
The Short Title: Vitamin D in SLE patients

Response

Agreed. I have no doubt regarding the title. First reviewer suggested mentioning the study location if that is not mandatory, we can go for the new title "**Association of vitamin D level with systemic lupus erythematosus disease activity: A case-control study.**" and The Short Title: **Vitamin D in SLE patients.**

Comment 2

Table 2: The mean (SD) data also needs a p-value.

References

I have done it and highlighted the correction with aqua color in the manuscript.

Comment 3

Table 3: The odds ratio data will be presented as "odds ratio (95% Confidence interval). Currently, it has 1.7, but I am not sure whether it is the OR given the footnote OR value is 11.3.

References

I have done it and highlighted the correction with aqua color in the manuscript. OR given the footnote OR value is 11.3, it has been deleted from the manuscript.

Comment 4

Table 4: Sun exposure is for <1 and >1 hour. Where does the value for 1 hour fall?

Response

Instead of </>, I have put the mark as < and ≥, and the problem is solved. Marked the correction with aqua color in the manuscript.

Comment 5

Table 5: As previously commented (number 12), the r-values for case and control combined (n=100) and cases alone (n=50) are not comparable. Values for the cases (n=50) should be dropped. However, you can mention the r values for cases in the text description of this table.

Response

Only case and control group data are given in the table without any Case Group data (n=50). However, the correlation of the SLE Disease Activity Index (SLEDAI) with vitamin D is an important finding to support the title of this article and one of the prime objectives. As this is a vital data, I think it should be mentioned both in text and table. Therefore, I have putted another graph (Co-relation graph between vitamin D and SLEDAI score) in Figure 1. Hope it will be helpful.

Round 4
25 October 2023

Executive editor's comments

Comment 1

Line 146: In this context, 'Baseline' pertains to the initial or starting characteristics of the study participants. Does this study have any follow-up?

Response

This study does not have any follow-up. The word “Baseline” is not appropriate here. I just wanted to mean instant or basic investigations or basic parameters. The line is corrected, and the word Baseline is omitted with Variables.

Comment 2

Line 147: Could you please provide a detailed explanation of how the Mann-Whitney U test was utilized in the analysis of categorical data? Tables 1 and 4: It has come to our attention that the Mann-Whitney U test was applied in both tables, which might not be the most appropriate choice. Please consider an alternative approach.

Response

Here in this study, the data were not distributed normally, so the non-parametric test was the better choice to see test significance, and I preferred to do the Mann-Whitney U test. Here, an unpaired t-test (tables 1 and 4) could be an option if the data were normally distributed. For the normality test Kolmogorov Smirnov, Histogram, and QQ plot tests were done. Here is the figure for further reference.

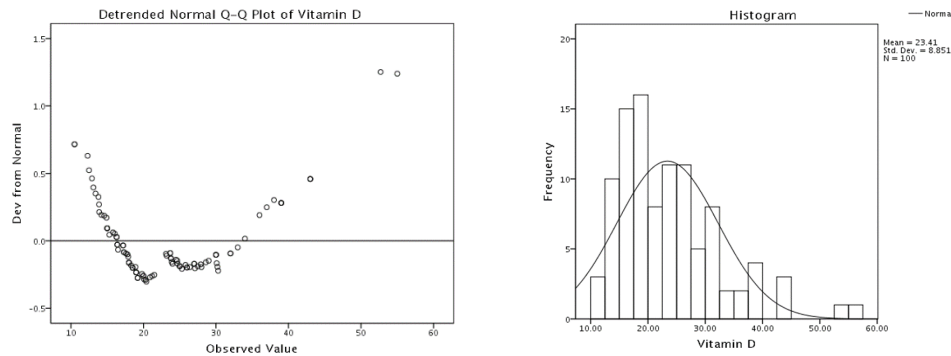


Fig: QQ plot (left) and histogram (right) for normality test

Moreover, I initially conducted the Kruskal-Wallis test for three subgroups, but I have since removed this analysis due to a correction. Additionally, I intended to incorporate a multivariate analysis to account for other factors in the study. However, I have excluded this analysis due to the limited sample size and the inability to identify significant variables. Moreover, considering the journal's constraint of a maximum of three tables/figures for concise articles, I have omitted this section. It's worth noting that we have plans to undertake a more extensive study on this topic in the future.

Round 5
19 November 2023

Executive editor's comments

Comment 1

Please submit the database for our validation of the results

Response

The SPSS version of the data has been attached to the OJS dashboard

Comment 2

The results were revised based on our analysis. Please check it.

Response

I'm ok with the revised results.

COPY EDITING

26 November 2023

Comment 1

All journal articles must have DOIs. In its absence, use the PMID number.

Response

I have checked all the references and put the DOIs, and all are in Vancouver style. If any necessary formatting is needed, please let me know.

Comment 2

Table 1 & 4: The results are to be given as "mean (standard deviation)" as per the Journal's style.

Response

I have done it and highlighted the correction with aqua color in the manuscript.

Comment 3

Figure 1 and text is not matched. Please rewrite the text.

Response

I have gone through the text and the figure 1. I have changed it as per your advice.