

1. Line 108: "*into account the issue of multi co linearity*" — There is a typo here; it should be "multicollinearity."
2. Line 117: "*to deficiency in males (, with a significance level of $p < 0.01$)*" — must be corrected like ($p < 0.01$)
3. Line 120: "*performance using different evaluation matrices*" — The term "matrices" should be corrected to "metrics."
4. In Tables: Replace " F-score" with "F1-score"
5. Table 4: Correct "sizw" to "size."

AND MANY MORE. The manuscript should be thoroughly reviewed and revised to correct writing errors and improve the overall writing style.

6. Please provide detailed information about the feature selection process, including which method was used and which features were included in the model.
7. Multicollinearity problem must be checked. If it exists, the model's performance should be examined under the condition of multicollinearity.
8. The proposed model's robustness should be evaluated using various methods and testing scenarios.
9. Lines 41–42: "*In the past, traditional techniques for predicting and diagnosing VDD involved testing the levels of serum 25-hydroxyvitamin D [15(OH)D] levels through biochemical assays*" — Please correct "[15(OH)D]" to "25(OH)."
10. The structure of the manuscript is quite disorganized. The *Results* and *Discussion* sections should be restructured to enhance clarity and readability.
11. Carefully check the reference list; references 1–3 and 2–4 appear to be duplicates.
12. Please include a descriptive statistics table for all features used in the study. (Check the content of reference 2 in your reference list as a sample of the descriptive statistics table)
13. The conclusion must be rewritten to provide clear insights and actionable implications based on the study findings.
14. The title should be rewritten to reflect the methods used in the proposed model
15. Please paraphrase this paragraph to prevent similarity:

C. Ablation study

471 The ablation study is carried out to assess the effectiveness of each part by eliminating the components and observing how the model works under various conditions. The following conclusions are reached from the dataset results (see Table 7):