

Review of: "A Rapid and Robust DNA Extraction Method for PCR-Based Diagnosis of V. cholerae"

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Potential competing interests: No potential competing interests to declare.

I consider this article valuable because it explores the possibility of conducting rapid cholera diagnosis without requiring sophisticated infrastructure or highly trained personnel. This methodology could be utilized in both outbreaks and surveillance activities, assisting countries in timely implementation of public health interventions.

Here are some suggestions to improve the interpretation of the text. I apologize in advance if any of my suggestions are irrelevant:

1-In **the introduction**, I suggest improving the wording. For example, in the sentence "The long-standing conventional method of diagnosis is the gold standard for detection of V. cholera," it is not clear that the term "gold standard" refers to cell culture. Although this is clarified later, it would be beneficial to explicitly state this in the sentence.

2-In the **materials and methods** section, a total of 44 samples of V. cholerae O1 strain from laboratory stocks were used, and two DNA extraction methods were applied: a new, shorter method, and the conventional method taking 3 days. However, clarity of the results was affected during PCR. It is suggested to improve Table 1 to specify the primers used (forward and reverse), reference numbers of the detected genes, among other details. While references are provided in the table, not all readers may have open access to the cited articles, which hinders obtaining additional necessary information for complete understanding of the study.

3-In the **materials and methods**, the description of sensitivity does not clarify if the conventional extraction method was applied to the lysates and if the same dilutions were performed. I assume it was, given that the results and discussion mention that both methods yielded equal sensitivity results.

4-In the **materials and methods**, when evaluating the 20 clinical cases, it is not clear if it was compared with the traditional extraction method.

5-In the **results and discussion**, I was unable to find Figure 1.

For future research, it would be beneficial to include more clinical samples and consider implementing LAMP PCR to enhance the technique's robustness. I hope my comments are helpful, and I congratulate the authors on their work.

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