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LETTER

Lesson Learned from Mass Antibody Rapid Diagnostic Used in the Early COVID-19 Pandemic in Indonesia Contributors [Letter]

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Dear editor

We are writing in response to the in-depth findings presented in the article entitled "Lesson Learned from Mass Antibody Rapid Diagnostic Used in the Early COVID-19 Pandemic in Indonesia Contributors" by Indrati et al,[1] published in Medical Devices: Evidence and Research. This study reveals a comprehensive analysis of the performance and characteristics of SARS-CoV-2 antibody rapid diagnostic tests (RDTs) used in the early phase of the COVID-19 outbreak in Indonesia. The authors conducted a comprehensive evaluation of various antibody RDTs, including total, IgG, and IgM, to assess the accuracy of the diagnostic results and their utility in differentiating between past and current infections. Furthermore, a comprehensive examination of sample characteristics, including the diversity in sample status and type, enhances our comprehension of the practical applications of these diagnostic tools in real-world settings.[2] In conclusion, this paper makes a significant contribution to the field by offering valuable findings regarding the effectiveness and challenges associated with using antibody RDTs for the diagnosis of COVID-19.

Although this study provides valuable and outstanding findings, it also highlights several weaknesses and limitations that need to be considered. One significant limitation of this study is its retrospective nature, which may introduce bias and limitations in data interpretation. Furthermore, the heterogeneity of the screening process and the relatively small sample size for some brands of antibody RDTs may impact the validity and generalizability of the findings.[3] Furthermore, this study identified common technical issues, such as unclear or invalid results, which underscores the necessity for enhanced standardization and quality control measures in the manufacture and application of RDTs.

In the future, it is imperative that these limitations be addressed and that strategies be implemented to enhance the reliability and effectiveness of antibody RDTs for the diagnosis of COVID-19. Cross-sectoral collaboration between regulators, manufacturers, and healthcare professionals is crucial to ensure rigorous pre-market evaluation and validation of diagnostic tools. In particular, clinical pathologists can play a pivotal role in evaluating the performance of RDTs and providing invaluable insights on their utility in real-world settings. Furthermore, efforts should be made to increase transparency and standardization in the process of manufacturing and implementing RDTs, including the development of clear guidelines for interpretation of results and quality control measures. By addressing these challenges and implementing robust quality assurance measures, we can improve the accuracy and reliability of antibody RDTs, thereby improving the diagnosis and treatment of COVID-19 patients.

Disclosure

The authors report no conflicts of interest in this communication.

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