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Retraction of Studies on Potential Drug Therapies for COVID-19: A Call for Reliability and Scientific Integrity

The author of this paper recently discussed the findings on cardiovascular safety of the controversial use of chloroquine and hydroxychloroquine for the treatment of COVID-19 reported in observational studies, stressing the need of high quality large randomized controlled trials in order to assess the effectiveness and safety of these drugs and other potential therapies for COVID-19.[1] One of the commented studies,[2] which reported a decrease in the in-hospital survival and an increased frequency of de-novo ventricular arrhythmias with the use of chloroquine or hydroxychloroquine, was recently retracted by 3 of the 4 authors, causing controversy in the scientific community and raising serious concerns on the reliability of published papers and the transparency and accountability of researchers particularly in the midst of this global health crisis. The reasons that lead the retraction of the aforementioned study as well as the analysis of other studies with implications for cardiovascular safety that have also been retracted or subjected to an expression of concern, are worthy of consideration.

In a recent comment, Mehra et al[2] stated that after an unsuccessful attempt to conduct an independent peer review of the database on which their findings were based, they can no longer assure the veracity of their conclusions thus, they requested the retraction of their publication. Likewise, a different study conducted by Mehra et al[3] assessed the relationship of cardiovascular disease and drug therapy with in-hospital mortality among patients with COVID-19. In this study the authors reported no increased risk of in-hospital mortality associated with the use of angiotensin-converting−enzyme inhibitors and angiotensin-receptor blockers. However, in a subsequent letter the authors argued that they were unable to access to the raw data and the database was not available to a third-party auditor validation therefore, the authors asked for retraction of the paper.[3] At this time, 15 studies about COVID-19 have been retracted, 2 temporarily retracted and 1 subjected to an expression of concern.[4]

The rush for showing results and publishing papers despite its lack of validation, as health professionals and patients desperately seek treatment options, illustrate the obvious need for strengthening the review process of papers for accuracy and reliability before publication and a call to follow the standards of the International Committee of Medical Journal Editors and the Committee on Publication Ethics. Considerations regarding veracity and scientific integrity are of utmost importance. As previously stated by the author of this paper, the current findings on efficacy and safety of the potential therapies for COVID-19 require validation from high-quality large randomized controlled trials.[1]

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The Era of Point-of-Care Ultrasound Has Arrived: Are Cardiologists Ready?

Dear editor,

Point-of-Care Ultrasound (POCUS) has become a vital tool for bedside diagnosis and management in patient care. Accordingly, POCUS is becoming an important educational component in medical school and residency training programs. Although POCUS protocols can be generalized and involve multiorgan assessment, the fundamental component of bedside ultrasound assessment is cardiac POCUS, or similarly termed "focused cardiac ultrasound." A recent publication by Kirkpatrick et al defined three forms of focused cardiac ultrasound: Ultrasound-assisted physical examination, cardiac POCUS, and critical care echocardiography.[1] However, with significant overlap between these forms of focused cardiac ultrasound, distinguishing between them may be of lesser importance from a practical standpoint.

Traditionally, the providers involved in obtaining and interpreting bedside cardiac POCUS have been predominantly non-cardiologists, including specialists in critical care medicine, emergency medicine, and anesthesia. This emphasis on cardiac POCUS by non-cardiologists is reflected by the increasing number of publications and training courses on cardiac POCUS, which are almost exclusively led by various non-cardiology professional societies.[2,3] In particular, cardiac POCUS in the setting of critical care is increasingly perceived as its own entity with a separate term "critical care echocardiography." In fact, critical care echocardiography has been advocated as an essential component of training and is