

LETTER TO THE EDITOR

Effectiveness of Rapid Response Teams and the Importance of Preprints

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To the Editor of the International Journal of Cardiovascular Sciences,

We have read with interest the Point of View:¹ "Performance of the Rapid Response Systems in Health Care Improvement: Benefits and Perspectives" by Viviane Cordeiro Veiga and Salomón Soriano Ordinola Rojas, published ahead of print in the International Journal of Cardiovascular Sciences on April 15, 2019. Rapid response teams to treat trauma patients in Australia 30 years ago, in 1989. From the outset, the aim was to early recognize signs of deterioration and provide a quick response, hence the name of the methodology.² The discussion about the activation criteria is relevant and up to date and was treated in a solid manner by the authors in the introduction of the point of view. Indeed, it is known that this is the cause of part of the heterogeneity of results found in studies on the subject.

However, the results section fails to present references that support the claims. New and old papers were cited, leading to a contrast between a point in time of knowledge in which there was still no consensus on the effects of the technology in question and the current knowledge. Especially worrying, it is stated that studies that evaluate the effectiveness of rapid response teams in reducing mortality still present conflicting data, citing Chan's meta-analysis from 2010,³ which analyzed studies published up to 2008, that is, more than a decade ago. This study and the systematic review of the Cochrane Collaboration from 2007 are undoubtedly studies of extreme importance to the area, but many others have

followed. Another meta-analysis, conducted in 2015, evaluated studies published until 2013 and reported a statistically significant reduction in mortality (13%) and in cardiac arrest (35%).⁴ Subsequently, further studies were published, and a meta-analysis held in 2018 with increased volume of evidence confirmed this conclusion, with a 15% reduction in mortality.⁵

Obviously, the authors may have reviewed this evidence to form an opinion on the subject, however it is likely that the last decade has produced evidence of sufficient quality to merit at least a discussion from the point of view presented. In this context, it is extremely salutary that the International Journal of Cardiovascular Sciences has encouraged the publication of preprints. The speed of publication has increased and getting reviewers experts in increasingly complex topics has become more and more difficult. With this in mind, other areas of knowledge have stimulated the use of preprints, which allow other peers in that area to have contact with the manuscript prior to publication and to even contribute to the quality of the manuscript. It is believed that this is one of the alternatives to guarantee the quality of the published items, considering the number of retractions and corrections that we have seen in Medicine in the last years.⁶

In conclusion, considering the rapid response team as a consolidated strategy to increment the quality of hospital care, supported by current American Heart Association's recommendations for advanced life support (as reported by the authors), we consider the viewpoint of the authors distant from current literature, which already presents robust evidence for the effectiveness of the technology. Medical and managerial decisions taken at the hospital level affect thousands of individuals, and medical journals should always bring the most complete and reliable information possible.

Keywords

Hospital Rapid Response Team; Patient Safety; Patient Care Team; Hospital Mortality.

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