

An Assessment of Academic Integrity and Trustworthiness In COVID-19 Randomized Controlled Trials

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Abstract

Objective

Recently the integrity and trustworthiness of scientific studies have become a rising issue and topic of concern. Randomized controlled trials (RCTs) are the gold standard of trial design and are crucial for the development of therapeutic guidelines and clinical decision making. Given that it is entirely possible for fraudulent RCTs to appear in widely-read peer-reviewed journals there is a possibility for these studies to be seen as respectable, used by clinicians, and potentially cause patient harm. This review investigates and assesses 20 randomized controlled trials in the field of COVID-19 for signs of a lack of trustworthiness and integrity.

Methods

To gather the studies a search was completed on Pubmed.gov using the Mesh terms “COVID-19” and “Drug Therapy”. The integrity and trustworthiness of the studies were assessed utilizing a modified data extraction tool which included select questions from the Cochrane Pregnancy & Childbirth Trustworthiness Screening Tool (CPC-TST), and The ‘Reappraised’ Checklist For Evaluation of Publication Integrity. Additional questions were added to make the modified data extraction more complete.

Results

20 studies were found in the search and included in the final analysis. Of those studies 17 (85%) met at least one high-risk criteria, while only 3 (15%) studies met no high-risk criteria. Several studies met multiple high-risk criteria, the two studies Ghanei 2021 and Fakharian 2021 having the most high-risk criteria at 5 high-risk criteria met each.

Conclusion

This analysis displayed several peer-reviewed RCTs in prodigious journals which had met at least one criteria for a higher risk of fraud. Additionally, several studies identified in this analysis warrant further investigation and contact to explain irregular results. Due to the current scientific landscape, there are multiple factors that may push researchers to fabricate or alter data. Peer-reviewed RCTs should not be considered automatically free of concern, even if they are published in respected journals, and should be assessed for integrity and trustworthiness regardless.