
2024 POSTDOCTORAL SYMPOSIUM

Lightning Talk – Finalist

A Framework for Understanding and Resolving
Pseudoscience Crisis

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Credibility and Declining Trust In Academia

- Good scholarly research has enhanced our understanding of the world
 - Pew Research Center survey shows American's positive views of science continue to decline from 28% in 2021 to 34% in 2023
 - 10,000 papers retracted by research journals in 2023 (The Guardian.com, 2024).
 - Last Tuesday, Wiley publisher announced that it is closing 19 journals involved in research fraud (WSJ.com, 2024)
 - Most analysts believe the figure is only a tiny fraction of pseudoscience.
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Understanding Pseudoscience Crisis

- Pseudoscience is a **practice** through which scholars claim that their findings are **factual** and **novel**, but they are not.
 - a) Research findings lack scientific evidence or are based on false data.
 - b) Give New labels to old theories, hence creating new buzzwords but not new knowledge.
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Recent Big Disasters in Scientific Research

THE LANCET Submit Ar

ARTICLES | ONLINE FIRST PDF [1 MB] | Figu

RETRACTED: Hydroxychloroquine or chloroquine with or without a macrolide for treatment of COVID-19: a multinational registry analysis

Prof Mandeep R Mehra, MD   • Sapan S Desai, MD • Prof Frank Ruschitzka, MD • Amit N Patel, MD

Published: May 22, 2020 • DOI: [https://doi.org/10.1016/S0140-6736\(20\)31180-6](https://doi.org/10.1016/S0140-6736(20)31180-6) •  Check for updates

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y Material
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- Figures

Summary

Background

Hydroxychloroquine or chloroquine, often in combination with a second-generation macrolide, are being widely used for treatment of COVID-19, despite no conclusive evidence of their benefit. Although generally safe when used for approved indications such as autoimmune disease or malaria, the safety and benefit of these treatment regimens are poorly evaluated in COVID-19.

Methods

We did a multinational registry analysis of the use of hydroxychloroquine or chloroquine with or without a macrolide for treatment of COVID-19. The registry comprised data from 671 hospitals in six continents. We included patients hospitalised between Dec 20, 2019, and April 14, 2020, with a positive laboratory finding for SARS-CoV-2. Patients who received one of the treatments of interest within 48 h of diagnosis were included in one of four treatment groups (chloroquine alone, chloroquine with a macrolide, hydroxychloroquine alone, or hydroxychloroquine with a macrolide), and patients who received none of these treatments formed the control group. Patients for whom one of the treatments of interest was initiated more than 48 h after diagnosis or while they

Recent Big Disasters in Scientific Research

'I Am Innocent': Embattled HBS Prof. Francesca Gino Defends Against Data Fraud Allegations in Letter to Faculty



Francesca Gino, a Harvard Business School professor accused of data fraud, defended herself in an email to HBS faculty. By [Courtesy of Francesca Gino](#)

A Way Forward – 3C framework (First C)

Careful Reading



Health

Life, But Better

Fitness

Food

Sleep

Mindfulness

Relationships

Severe depression eased by single dose of synthetic ‘magic mushroom’

A Way Forward – 3C framework (Second C)

Cover Nonlinear Process

&

Chaotic Process

A Way Forward – 3C framework (Third C)

Clarifying Assumptions

Instead of Calling IT NEW

Thank You So Much

Every Saint Has a Past, and
Every Sinner Has a Future

Unknown

References

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