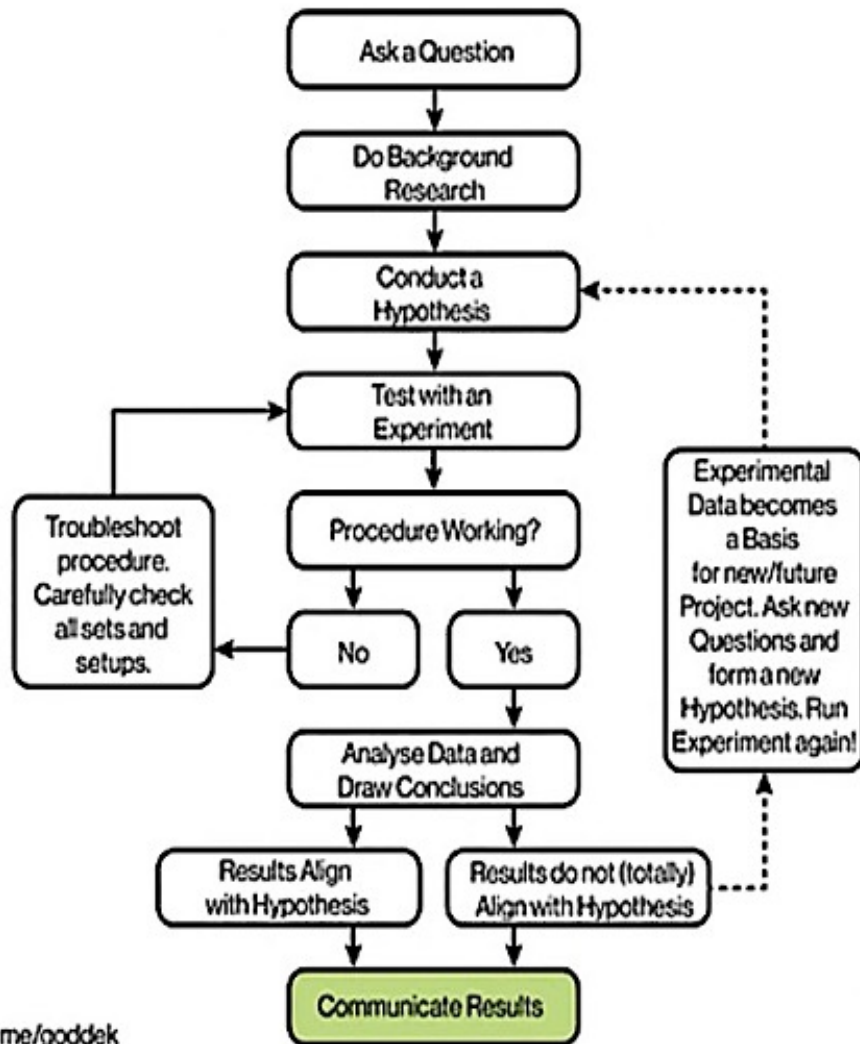
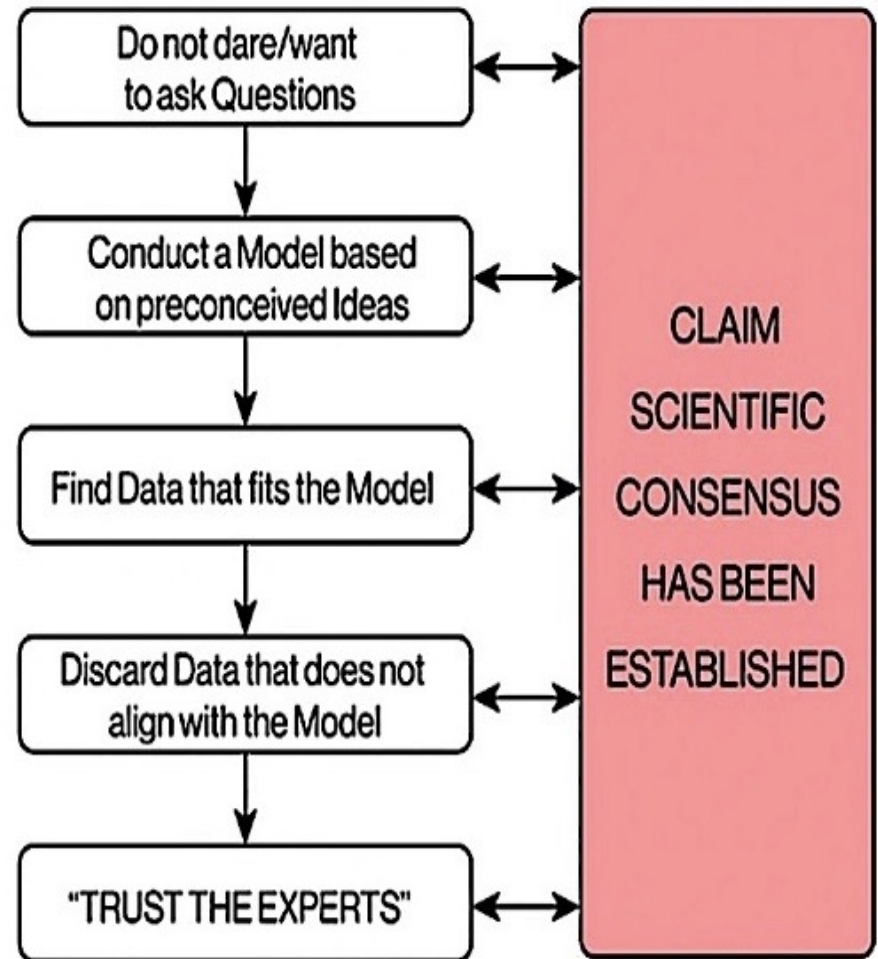


# Do not confuse science with scientism!

## Science



## Scientism



## Scientific Fraud

In May 2020, the British journal *The Lancet* [published a study](#) showing COVID-19 patients treated with hydroxychloroquine dying at a higher rate than patients not receiving this drug.

The WHO and governments all over the world responded by [limiting access](#) to this commonly used generic drug.

This study was retracted when readers started reporting [glaring inconsistencies](#) in the hospital data, and the third party providing the data [suddenly became unavailable](#).

At the time of publication, one of two lead co-authors was [conducting trials](#) with the far more profitable COVID treatment, Remdesivir.



Sapan Desai, head of Surgisphere



## Editor of Lancet: *Medical Research is Unreliable at Best or Completely Fraudulent*

Dr Richard Horton declared, “Much of the scientific literature, perhaps half, may simply be untrue. Afflicted by studies with **small sample sizes, tiny effects, invalid exploratory analyses, and flagrant conflicts of interest**, together with an obsession for pursuing **fashionable trends** of dubious importance, science has taken a turn towards darkness.”

<https://www.drugawareness.org/editor-of-lancet-medical-research-is-unreliable-at-best-or-completely-fraudulent/>

# Red Flags for Discerning Fraud:

- **Is it corroborated?** *Does it concur with raw data? Does it concur with independent sources?*
- **Who benefits?** *Who sponsored the research? Does it benefit influential organizations with deep pockets?*
- **What is the track record of the researchers?** *Did they ever participate in rigged studies? Do they have conflicts of interest?*
- **What is the track record of the peer reviewers?** *Do they have conflicts of interest?*
- **How do the authors react when confronted with contrary evidence?** *Do they evade scientific arguments?*
  - **Legitimate:** *Criticism that focuses on specific details (itemized)*
  - **Evasive:** *Generalized criticism, ad hominem attacks, straw man arguments, gaslighting, censorship*

# Astroturfing = fake grassroots movement

*The whole point of astroturf is to try to convince you there's widespread support for or against an agenda when there's not. The language of astroturfers and propagandists includes trademark inflammatory terms such as: anti, nutty, quack, crank, pseudo-science, debunking, conspiracy theory, deniers, and junk science.*



<https://sharylattkisson.com/2016/07/top-10-astroturfers/>

**Example:** You choose to “do your own research” on the safety of a given drug, not knowing that your internet search was rigged (via bots & sock puppet accounts), your physician was nudged (via free samples & workshops) and your other “trusted sources” like mainstream media and government agencies were captured (via sponsors, grants, user fees, job offers, & partnerships).

## Review Questions

5. A study evaluating the safety of a new hypertension treatment shows a higher death rate in people receiving the new drug. Which critique of the study is an example of a **straw man** argument?
- a. The study tries to discredit the use of innovative therapies for treating people with hypertension.
  - b. The study was poorly designed because the sicker patients got the new drug.
  - c. The study was rigged.
  - d. The researchers are just amateurs that teach at a community college.



## Review Questions

6. A study evaluating the safety of a new hypertension treatment shows a higher death rate in people receiving the new drug. Which critique of the study is an example of an **ad hominem** attack?
- a. The study tries to discredit the use of innovative therapies for treating people with hypertension.
  - b. The study was poorly designed because the sicker patients got the new drug.
  - c. The study was rigged.
  - d. The researchers are just amateurs that teach at a community college.

## Review Questions

7. A study evaluating the safety of a new hypertension treatment shows a higher death rate in people receiving the new drug. Which critique of the study is an example of **itemized** criticism?
- a. The study tries to discredit the use of innovative therapies for treating people with hypertension.
  - b. The study was poorly designed because the sicker patients got the new drug.
  - c. The study was rigged.
  - d. The researchers are just amateurs that teach at a community college.



## Review Questions

8. A study evaluating the safety of a new hypertension treatment shows a higher death rate in people receiving the new drug. Which critique of the study is points out a possible **conflict of interest**?
- a. The study tries to discredit the use of innovative therapies for treating people with hypertension.
  - b. The study was rigged
  - c. The research was funded by competitors profiting from an alternative therapy for hypertension.
  - d. The researchers are just amateurs that teach at a community college.