Analysis: Trump's "Gold Standard Science" is already wearing thin

On May 23, President Trump issued an executive order entitled "Restoring Gold Standard Science." And, in news that may surprise our readers, it sounds remarkably good, focusing on issues like reproducibility and conflicts of interest. While there were a few things that could be phrased better, when it comes to basic scientific practices, the language was remarkably reasonable.

So, why didn't we report on what appeared to be a rare bit of good news? I'd considered doing so, but the situation is complicated by the fact that the order is structured in a way that makes it very sensitive to who's responsible for implementing it, a situation that's subtle enough that I couldn't figure out how to handle it well. Fortunately, I only had to wait a week for a member of the Trump administration to show just how dangerous it could be and highlight its biggest problem.

On Sunday, Food and Drug Administration Commissioner Marty Makary appeared on one of the weekend news programs, where he was asked about the decision to limit pregnant people's access to the COVID-19 vaccines. The host mentioned that aggregation of studies involving a total of over 1.8 million women had shown the vaccine was safe and effective.

Makary dismissed all that data because it wasn't "gold standard science," perfectly illustrating how the phrase can be used as a tool to mislead the public.

Setting standards

The executive order defines gold standard science in various ways that have already been discussed and promoted by the scientific community itself, including groups like the open science movement. It mentions things such as reproducibility and the use of hypotheses you can show are wrong, the open communication of results and uncertainties, and a focus on collaborative work. It also includes a few obvious rules, such as forbidding federal employees from engaging in research misconduct.

Overall, when it comes to scientific practice, the elements of gold standard science appear to range from obvious and innocuous to highly positive.

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