New study calls into question early claims of COVID-19 'infodemic' of health misinformation
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In a first-of-its-kind study comparing hundreds of millions of social media posts about online health topics, a team of researchers found that posts about COVID-19 were less likely to contain misinformation than posts about other health topics. The researchers found that health misinformation was already widespread before the COVID-19 pandemic. Although all types of information about COVID-19—including misinformation—were popular between March and May 2020, posts about COVID-19 were more likely to come from governments and academic institutions. In many cases, these posts were more likely to go viral than posts from sources that routinely spread misinformation.

"At the start of the pandemic, governments and organizations around the world started paying attention to the problem of health misinformation online," David Broniatowski, an associate professor of engineering management and systems engineering at the George Washington University and associate director of GW's Institute for Data, Democracy and Politics, said. "But when you compare it to what was going on before the pandemic, you start to see that health misinformation was already widespread. What changed is that, when COVID-19 hit, governments and social media platforms started paying attention and taking action."

The team collected public posts on Twitter and Facebook at the very start of the pandemic—between March 2020 and May 2020—when content about COVID-19 was growing rapidly. They compared those posts to posts about other health topics from the same time period in 2019, looking at the credibility of the websites that each post shared. More credible sources included government and academic sources as well as the traditional news media. Sources deemed "not credible" comprised conspiracy-oriented sites and state-sponsored sites known for spreading propaganda, which were 3.67 times more likely to spread misinformation than credible sites.

"Misinformation has always been present, even at higher proportions before COVID-19 started. Many people knew this, which makes the ensuing misinformation spread during COVID-19 entirely predictable," Mark Dredze, an associate professor of computer science at Johns Hopkins University, and co-author of the study, said. "Had we been more proactive in fighting misinformation, we may not have been in an anti-vaccination crisis today."

"These findings suggest that the 'infodemic' of misinformation is a general feature of health information online, not one restricted to COVID-19," Broniatowski said. "Clearly there is a lot of misinformation about COVID-19, but attempts to combat it might be better informed by comparison to the broader health misinformation ecosystem."
Sandra Crouse Quinn, a professor at the University of Maryland's School of Public Health and a co-author on the paper, emphasized the research's focus on the pandemic's beginning.

"At this point in the pandemic, it is critical for new research to further explore COVID-19 misinformation within the health misinformation ecosystem, but most importantly, how we can combat this challenge," Quinn said.

The paper, "Twitter and Facebook posts about COVID-19 are less likely to spread misinformation compared to other health topics" was published in the journal PLOS ONE on Jan. 12. The research team also included researchers at the University of Maryland, Johns Hopkins University, University of Pittsburgh, University of Memphis and San Diego State University.

Broniatowski is affiliated with the GW Institute for Data, Democracy & Politics, which launched in 2019 with the support of the John S. and James L. Knight Foundation. The institute's mission is to help the public, journalists and policy makers understand digital media's influence on public dialogue and opinion, and to develop sound solutions to disinformation and other ills that arise in these spaces.

More information: "Twitter and Facebook posts about COVID-19 are less likely to spread misinformation compared to other health topics" PLOS ONE (2022). journals.plos.org/plosone/article ... journal.pone.0261768

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