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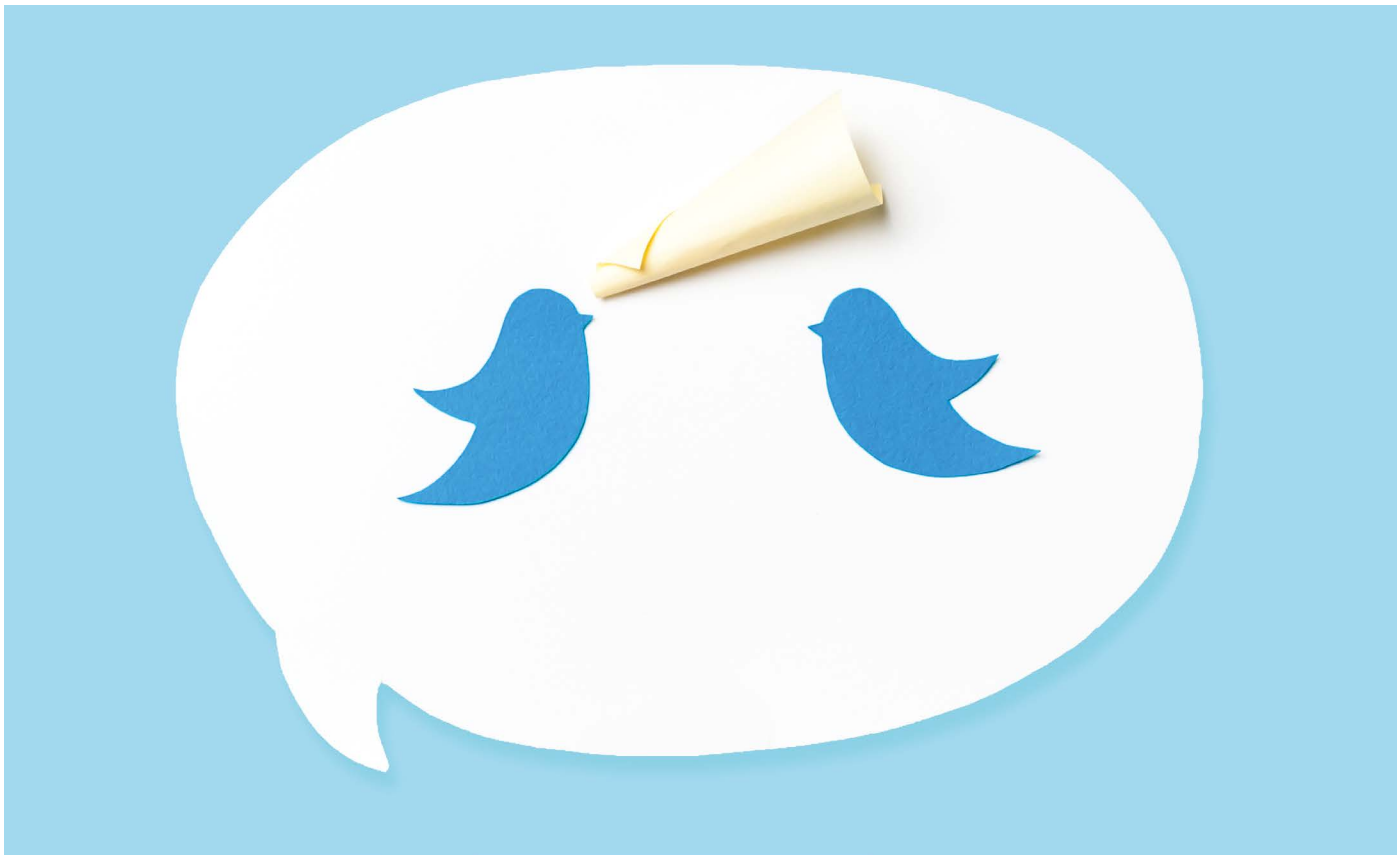

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FIGHT CORONAVIRUS MISINFORMATION

Use social media to spread good pandemic science.

By Samantha Yammine

Unsurprisingly, millions of people are talking about the coronavirus on social media. According to the analytics platform Sprinklr, there were more than 19 million mentions of coronavirus across social media on 11 March (the day the World Health Organization called the outbreak a pandemic), and a report by Twitter in early April said that COVID-19-related tweets were being shared every 45 milliseconds.

As the pandemic continues to evolve and we look towards long-term management strategies, we must continue these conversations — and make sure that science is a part of them. But, as science-communication experts have been saying, simply spewing scientific facts from a soapbox isn't enough: research shows that it's more important to start a dialogue.

When used strategically, social media can make it easier to have such conversations at scale. I am a scientist who shares online updates about COVID-19, and my coronavirus social-media content has been viewed millions of times. I feel that I'm doing more than adding sound to all the noise because my engagement rates have been as high as 24% on Instagram, more than 10 times the industry standard, and 49 times the standard on my COVID-19 tweets.

"Acknowledging that it isn't easy to be cooped up at home is not only honest, but relatable. And relatability is a key component of trust."

And it's particularly important to share accessible science through social media because trolls and conspiracy theorists are spreading seeds of doubt and misinformation that can have dangerous consequences.

Good science communication involves storytelling, avoiding jargon and making science accessible. Here are tips on sharing information at scale on social media.

Amplify first. Not everyone has the time or skillset to create new material for sharing on social media, but amplifying the messages of

others is a helpful way to contribute. Your likes, shares and retweets are a form of social currency: instead of angrily sharing only things you disagree with, use your currency to boost credible work to help good content to go viral.

If you do want to make content, aim to fill a gap: address a common point of confusion no one has tackled yet, or find a unique way to share knowledge (for example, through art, dance, rap or pop-culture references).

Avoid 'hot takes'. The scientific process is rooted in a culture of debate and collaborative criticism — we're all used to attacking things. Before firing off a juicy tweet, think deeply about whether it'll cause more confusion than clarity if seen by people who aren't your colleagues. If a minor, debatable detail wouldn't change public-health guidelines, perhaps it's an argument best saved for another time.

Create content tailored to your target audience. Make your content as data driven as your research is. Perhaps you want to reach young people who are disregarding social distancing. Your next step would be to see what platform that demographic uses, and how they communicate there. For example, 65% of Instagram users globally are under the age of 34; 72% of teens who are online are using Instagram; and 41% of people who use the video-sharing platform TikTok are between 16 and 24 years old.

But simply a clip re-shared from the evening news isn't likely to spread far on TikTok. At any given time, there will be trending audio clips, dances, challenges and memes, and new videos shared with these trends often enjoy a lot of traffic. Repackaging scientific information in trending formats can make it more visible.

Have a hook, but avoid clickbait. A standard scientific paper builds information through a few paragraphs in the introduction, with the 'hook' or main findings in the final sentence of that section. To reach a broader audience, reverse that process: start with that hook to entice readers to delve into the details.

Hooks framed as questions often do well, but readers can be disappointed if the answer is a simple yes or no. And leading questions that imply doubt can spread misinformation if people don't read on. So instead of 'Does hand sanitizer work only on bacteria?", try 'How does hand sanitizer kill viruses and bacteria?'.

A picture or graphic can serve as an exciting hook to make someone pause while scrolling through their newsfeed. Use design tools such as BioRender, Canva and VSCO to create and edit photos and graphics.

On Instagram and TikTok, use hashtags to reach fresh audiences. Users can discover content through search functions on social-media platforms, so you can drive traffic to your post without having many followers by using hashtags related to COVID-19. Twitter indexes content in search results by any word in a tweet, but users can search content on Instagram and TikTok only using hashtags.

On Instagram, you can use up to 30 hashtags per post: use them all! Include a mix of broad, high-traffic hashtags such as #science, and niche hashtags such as #microbiology, #educational or #ScienceTeacher.

On TikTok, less is more: check out the latest hashtag trend and see if you can find a way to fit the information you want to share into that video format. Although you might not be able to pack much information into the one minute allowed per video, you can get new conversations started in the comments section.

Your hashtags should always be relevant to the content you're sharing, but you can broaden your reach beyond science 'echo chambers' (content that preaches to the converted, reinforcing existing beliefs) by incorporating other trends. Creative visuals that showcase science through a popular aesthetic — for example, by sharing your information alongside #calligraphy, #fashion or even #pastels — can put your content in front of high-traffic target communities.

And using more colloquial names for scientific terms, such as #covid or #corona, can help to broaden your reach beyond scientists.

If you're going to bust myths, do it compassionately. People are more likely to listen to someone who listens to them. To avoid being dismissive, I usually say, "I understand why you're nervous about ___, this is a really scary time. But ___." UK science-funder Wellcome's latest *Global Monitor*, published in June 2019, found that 18% of people have a high level of trust in scientists, and 54% have a medium level. We will get a lot further by fostering trusting relationships.

Be your authentic self. Scientists are people too. We are more than our graphs: epidemic curves showing the impact of physical distancing are important, but acknowledging that it isn't easy to be cooped up at home is not only honest, but relatable. And relatability is a key component of trust.

Including yourself in your story can help to convey warmth and trust, and to get people to listen and take your message to heart.

No public-health research is complete until the key findings are effectively communicated and, ideally, implemented. Although the scale of online platforms adds challenges to this task, it can be leveraged to share conversations about the life-saving science we need most.

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