Life Sciences
SUPERMIND

Science Communication

Battle the Infodemic

In the spring of 2020, the UN and WHO began to speak of the "infodemic," the presence of too much false and misleading information, as a major barrier to addressing COVID-19. Misinformation and distrust can be a particularly toxic mix causing people to reject health interventions like vaccines; disregard health guidance, as has been seen with Ebola; or try unproven and dangerous therapies like ingesting ivermectin to prevent COVID-19.

The multidisciplinary field of "infodemiology" should be supported to better understand the complex factors which lead to infodemics. Previously disconnected disciplines should be integrated to understand the challenges of information overload, including: communication, design, media studies, socio-behavioral factors, misinformation, and ethics and regulation of the information ecosystem. Reproducible patterns and cross-disciplinary metrics in infodemiology should be established. The extent to which offline behavior is influenced by online behavior (and vice versa) should be researched.

Coordinated education campaigns should be used to counter misinformation across platforms and through communities using traditional means, like media advertisements and schools, in conjunction with newer social media channels.

Connect to the Public Through Authentic Storytelling

We should employ stories with characters who create empathy and connection and highlight shared values. Most people do not respond to data or numbers. It is important to foster connections through emotion by using stories of hope, inspiration, and lessons through tragedy. We should work with artists and professional storytellers across media—film, TV, radio, podcasts, social media, and beyond—to share authentic messages from front line health-care workers, doctors, nurses, scientists, and researchers; leverage humor, dance, and other art forms to engage the public with targeted messaging; and connect to the public with true stories from community members, neighbors, and family members.

Engage and Empower Communities to Build Trust

Trusted community champions should be trained, supported, and funded to help build trusted social networks to minimize the impacts of misinformation. As recognized by the WHO, there is an urgent need to empower communities to manage infodemics and build resilient communities through co-designed interventions. Community engagement rooted deeply within local cultural contexts should be used to disseminate accurate information through coordinated education campaigns; and help to build resilience to infodemics and misinformation at individual, community, platform, and societal levels.

Verify True, Reliable Information

Much like the "blue check mark" used by social media platforms like Twitter, Facebook, and Instagram, similar methods of verifying true, reliable public health and scientific information should be used. The scientific community should rally around these sources of information when communicating with the public and insist on fact checking for media outlets.

An active network of scientists could be established who work together to ensure scientific data is technically synthesized, validated, differentiated, and prepared for dissemination. Unlike a formal review board for a scientific journal which fact checks existing information, this group would focus on proactive communication of correct information and triage what is most important to pass to communities.

A key component to ensuring this model's success is having expert representation from a broad pool of geographies participate in the exchange. As COVID-19 has shown, we could limit much mis-communication by the utilization of disparate models, learnings, and information gathered across borders.

Foster Scientific Literacy

The scientific community should play a more significant, active role in fostering broader scientific literacy amongst the public. Several aspects of understanding should be emphasized, including: (1) the science around symptoms, diagnosis, and disease transmission; (2) why the scientific community's advice and guidance continues to evolve; and (3) how to distinguish between reliable and unreliable sources.

Organizations like the "News Literacy Project" – which incorporates media literacy into education curricula – should be emulated by engaging and employing scientists and science communicators to validate facts and establish scientific literacy. Scientists should engage more actively in their communities, employing strategies to bridge communication gaps between scientists and non-scientists. Local school systems should partner with local universities to create STEM curricula to engage students at a young age with tools that educate and inspire, like virtual reality and virtual worlds, video games, and television programming. Research from organizations like the European project, RETHINK, should be utilized to help design programs which promote media literacy and critical thinking skills.

Understand Human Behavior and the Role of Culture

Understanding human behavior, and the role of culture in shaping it, can help the world to address future health crises more effectively. By investing in studies of behaviorial change and cultural and contextual influences, we could shift cultural distrust in science to public acceptance. We should use focus groups and participatory methods to determine how best to message and support necessary behavior changes and overcome barriers. We should develop tools which cut across physical and language barriers by recognizing that culture and histories of oppression affect how people receive and interpret messages.

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