A National Strategy to Counter COVID-19 Misinformation

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Summary

The United States accounts for over 20% of global deaths related to COVID-19 despite only having 4% of the world's population.[1] This unacceptable reality is in part due to the tsunami of misinformation surrounding COVID-19 that has flooded our nation. Misinformation not only decreases current compliance with best practices for containing and mitigating the spread of COVID-19, but will also feed directly into resistance against future administration of a vaccine or additional public-health measures.

The next administration should establish an office at the Department of Health and Human Services (HHS) dedicated to combating COVID-19 misinformation. This office should lead a coordinated effort to (i) ensure that evidence-based findings are at the core of COVID-19 response strategies, (ii) utilize data science and behavioral analytics to detect and counter COVID-19 misinformation, (iii) work with social-media companies to remove misinformation from online platforms, (iv) partner with online influencers to promote credible information about COVID-19, (v) encourage two-way conversations between public-health officials and the general public, and (vi) ensure that public-health communications are supported by on-the-ground action. If executed effectively, this effort will help to defeat the novel coronavirus and end the pandemic in the United States.

Challenge and Opportunity

There have been more deaths related to COVID-19 in the United States than in any other country, and the per-capita COVID-19 death rate in the United States ranks in the top 10 worldwide.[2] This unacceptable reality is largely part due to the extent of misinformation surrounding COVID-19 in the United States. According to the National Bureau of Economic Research (NBER), parts of the country exposed to media programming that downplayed the severity of the pandemic have experienced greater numbers of cases and deaths because people did not follow public-health precautions.[3] The Internet spreads false messaging as well. A Pew study found that over 80% of Internet users search for health-related information online—information that is often scientifically unproven, misleading, or entirely false.[4]

If things do not change, misinformation surrounding any future vaccine or treatments for COVID-19 is likely to be as considerable as misinformation surrounding public-health measures is today. This has alarming implications for our nation's capacity to control the pandemic. Studies have shown that anti-vaccine sentiment contributes to disease spread, including to multiple measles

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[1] World Health Organization (2020). WHO Coronavirus Disease (COVID-19) Dashboard. Accessed October 20.

[2] Worldometer (2020). COVID-19 Coronavirus Pandemic. Accessed October 29.

[3] Simonov, A.; et al. (2020). The Persuasive Effect of Fox News: Non-Compliance with Social Distancing During the COVID-19 Pandemic. National Bureau of Economic Research.

[4] Weaver, J. (2013). More people search for health online. NBC News, July 16.

outbreaks in places where measles was previously considered eliminated.[5] The bottom line is that combating misinformation is crucial to combating COVID-19.

The time is ripe for a concerted anti-misinformation campaign. As winter approaches in the United States and people begin spend more time in higher-risk indoor environments, it is imperative to arm the public with the best available knowledge of ways to minimize COVID-19 transmission. And as vaccine candidates approach maturity, it is equally important to educate the public on the true benefits and risks of vaccination. We have work to do. A recent poll found that just half of the American public plans to get a COVID-19 vaccine once one becomes available,[6] while a survey by the Center for Countering Digital Hate found that "individuals who relied on social media for information on the pandemic were more hesitant about the potential vaccine."[7] The next administration must seize the opportunity to effectively counter misinformation surrounding COVID-19 or risk prolonging the pandemic unnecessarily.

Plan of Action

Below, we offer a set of recommended actions to blunt the effect of misinformation surrounding COVID-19 and COVID-19 response.

Action 1. Launch an interagency effort to counter misinformation related to COVID-19.

The next administration should designate HHS as the lead agency for an interagency effort to counter COVID-19 misinformation and should create a new anti-misinformation office within HHS. Although this office will engage in public affairs, it must be independent from political influence and different from traditional public-affairs offices in order to remain credible and avoid becoming or being perceived as a "propaganda shop". In particular, the office should be led not by public-affairs professionals, but by scientists and public-health experts in collaboration with credible communicators. The State Department's Global Engagement Center (GEC) should lead on countering overseas misinformation pertaining to COVID-19. This activity is premised on GEC's Congressional mandate derived from the National Defense Authorization Act (NDAA). Finally, the White House Office of Science & Technology Policy (OSTP) and the National Security Council (NSC) should be tasked with coordinating interagency contributions to the anti-misinformation campaign by developing structures and processes to organize it. To ensure that this effort is science-based and insulated from politics, Congress and/or the Executive Branch should establish dedicated, multi-year funding streams for activities to counter COVID-19 misinformation and other public-health priorities.

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[5] Hussain, A.; et al. (2018). The Anti-vaccination Movement: A Regression in Modern Medicine. Cureus, 10(7).
[6] Cornwall, W. (2020). Just 50% of Americans plan to get a COVID-19 vaccine. Here's how to win over the rest. Science, June 30.
[7] Burkhi, T. (2020). The online anti-vaccine movement in the age of COVID-19. The Lancet: Digital Health, 2(10): E504–E505.

Action 2. Utilize data science and behavioral analytics to detect and counter COVID-19 misinformation.

Public-health messaging generally fails to maximize its reach in today's data-driven information ecosystem. Practices that have become common in the private sector—such as microtargeting and segmentation of audience preferences on social-media platforms, search engine optimization (SEO), and A/B testing of different message presentations—remain rare in public health. HHS and GEC should actively explore applications of data science and behavioral analytics to counter COVID-19 misinformation. This would include identifying segments of the population that are especially susceptible to misinformation, determining how to communicate about public-health measures in ways that resonate, and increasing web traffic to sites providing credible information about COVID-19 and COVID-19 response.

Action 3. Partner with social-media companies on an aggressive and transparent effort to remove misinformation related to COVID-19.

The single largest category of misleading or false claims (39%) related to COVID-19 on social media is misleading messages about the actions or policies of public authorities.[8] Although social-media companies are already increasing efforts to remove misinformation related to COVID-19 from their platforms, these efforts remain largely reactive and delayed. Public-health experts can support misinformation-removal efforts by continuously and proactively supplying social-media companies with verified information about COVID-19. Social-media companies can then establish robust and transparent mechanisms for reporting and removing information that clearly contradicts verified claims. HHS should establish partnerships with social-media companies to combat disinformation domestically. Scientists and researchers at HHS can contribute in-house expertise to this effort, and the agency can convene experts at external institutions to contribute as well. For issues involving the spread of disinformation on social-media platforms overseas or the spread of disinformation by international adversaries, the primary authority should be the GEC in coordination with the Department of Defense and the intelligence community.

Action 4. Launch a coordinated campaign of influencers supporting science and public health.

A study of COVID-19 messaging on social media revealed that misinformation from politicians, celebrities, and other prominent figures made up about 20% of false claims but accounted for 69% of total social-media engagement with COVID-19 misinformation.[9] While most misinformation related to COVID-19 related misinformation is spread by "ordinary people", social-media platforms are key nodes in our national information ecosystem. Influencers with large following on social media have a disproportionate ability to shape the national discourse. As such, engaging local, regional, and national influencers from outside of public health is an

[8] Brennen, J.; et al. (2020). Types, sources and claims of COVID-19 misinformation. Oxford, England: Reuters Institute.
[9] Ibid.

efficient way to counter pervasive misinformation. HHS should establish partnerships with influencers in media, arts, entertainment, and other industries to promote science-based messages about COVID-19, dispel pervasive misinformation, and provide consistent public-health guidance. This activity should be coordinated across key HHS entities such as the Centers for Disease Control and Prevention (CDC), the National Institutes of Health (NIH), and the Food and Drug Administration (FDA). A parallel international effort to engage with influencers from other countries should be led by the State Department's GEC and Bureau of Oceans and International Environmental and Scientific Affairs (OES), the Department of Defense, and the U.S. Agency for International Development (USAID), working in close collaboration with other countries and international organizations such as the World Health Organization (WHO).

Action 5. Encourage two-way conversations between public-health officials and the general public.

Social media is popular because it provides individuals, groups, and institutions the opportunity to have dynamic conversations. However, public-health messages from government officials—including messages posted on social-media platforms—typically need to be cleared through a lengthy review process. This makes it difficult or impossible for officials to take full advantage of the opportunity that social media provides to engage with audiences and debunk misinformation in near real time. HHS should develop standards and guidance for allowing public-health officials to dynamically interact with the public via social media in a more timely and effective fashion. Dynamic conversations and proactive messaging between public-health officials and the public can actually be more impactful than removing false information from social-media platforms, since removal typically occurs long after a significant number of individuals have already been exposed to the false message. Moreover, 59% of misinformation on social media is reconfigured information that includes both factual and false statements, as the most effective disinformation has a kernel of truth.[10] The integration of truth and fiction makes much misinformation hard to identify or remove through broad action. Empowering public-health officials to have bilateral conversations with the public enables nuanced, targeted response strategies in which officials can acknowledge true statements while simultaneously correcting inaccuracies or lies.

Action 6. Ensure that all public-health communications are matched with on-the-ground action.

Guidance from public-health officials will only be effective if matched with on-the-ground action ensuring that targeted audiences can follow through.[11] For example, guidance recommending COVID-19 testing for individuals in certain risk groups must be accompanied by the rollout of testing locations that are readily accessible to individuals in those risk groups. Guidance recommending teleworking or remote learning must be supported by efforts to make high-speed Internet and computers available to those who lack them at home. Guidance

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[10] Ibid.
[11] Randolph, Whitney, and Viswath K, (2005). Lessons learned from public health mass media campaigns: marketing health in a crowded media world. Annual Review Public Health 25:419-37.

recommending vaccination should only be issued once sufficient quantities of vaccine are available and affordable.

Precedents

The ongoing federal effort to counter COVID-19 misinformation/disinformation is largely focused on countering propaganda from adversarial states. Currently, the federal anti-misinformation/disinformation effort falls within the adversarial state and non-state actor framework, as memorialized in the National Defense Authorization Act (NDAA). The NDAA designates the State Department's Global Engagement Center (GEC) as the primary entity to "direct, lead, synchronize, integrate, and coordinate efforts of the Federal Government to recognize, understand, expose and counter foreign state and non-state propaganda and disinformation efforts aimed at undermining or influencing the policies, security, or stability of the United States, its allies and partner nations."[12] Senator Rob Portman (R-OH) and Senator Chris Murphy (D-CT) have introduced amendments into the FY 2021 NDAA to strengthen the GEC.

Although anti-propaganda actions should be part of a broader counter-misinformation/disinformation strategy, foreign propaganda is responsible for only a small fraction of the overwhelming amount of COVID-19 misinformation that is being circulated both nationally and globally. The scale and scope of COVID-19 misinformation—and the role of misinformation on prolonging and exacerbating the pandemic in the United States—calls for a broader, science-based response. HHS, home to the CDC, NIH, and FDA, is the natural lead agency for the domestic components of this response. The GEC should continue to lead on international anti-misinformation activities, but in close collaboration with HHS and its component entities.

Conclusion

Countering COVID-19 misinformation will help defeat the novel coronavirus. Effective communications resulting in large-scale compliance with public-health guidelines significantly helped to curb the spread of diseases such as smallpox and HIV/AIDS.[13] But in the age of social media, misinformation is more prevalent than it was during past disease crises. The next administration must rise to the occasion with a sophisticated response. The six recommendations detailed in this memo provide the backbone of a strategy for an anti-misinformation campaign tailored to a modern information ecosystem.

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[12] H.R.5681 - Global Engagement Center Authorities Act of 2018. Available at https://www.congress.gov/bill/115th-congress/house-bill/5681/text.

[13] Bertrand JT, O'Reilly K, Denison J, Anhang R, Sweat M. (2006). Systematic review of the effectiveness of mass communication programs to change HIV/AIDS-related behaviors in developing countries. Health Educ. Res. 21(4):567–97
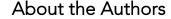
Frequently Asked Questions

Why does the next administration need to create a new office at HHS to combat misinformation? Why can't existing federal offices lead this effort?

Existing federal entities such as the State Department's Global Engagement Center, the Department of Homeland Security's Cybersecurity and Infrastructure Agency (CISA), and the Department of Defense have experience in tackling misinformation. However, these entities lack the personnel capacity and scientific expertise to counter the volume and type of misinformation circulating about COVID-19. The COVID-19 misinformation problem in the United States is more of a public-health issue than it is a national-security issue. An effective response to this problem must therefore be led by a public-health agency like HHS.

How would this new effort fit in with other federal counter-misinformation/disinformation efforts in the context of COVID-19?

Currently, a broad plan does not exist to counter misinformation related to COVID-19. Instead most federal counter-misinformation/disinformation efforts in the context of the pandemic have primarily focused on addressing propaganda from adversarial states. Although those efforts should remain an element of the federal government's counter-misinformation/disinformation mission, foreign propaganda represents a small fraction of the volume of COVID-19 related misinformation circulating nationally and globally. The U.S. government's top priority in countering COVID-19 misinformation should be defeating the COVID-19 pandemic. This emphasis is largely absent from the ongoing federal counter-misinformation/disinformation efforts both domestically and internationally.

About the Authors

Amir Bagherpour is a social scientist and Adjunct Senior Fellow at the Federation of American Scientists (FAS). His areas of expertise are disinformation risk, crisis and conflict risk forecasting, and emerging technologies. Dr. Bagherpour is a Principal Director and Senior Data Scientist at Accenture. Dr. Bagherpour previously served as Director of Data Analytics in the Office of the Secretary of State and as Chief of Advanced Analytics at the Department of State's Bureau of Conflict and Stabilization Operations. Dr. Bagherpour has a Ph.D. in Political Science with an emphasis in Quantitative Methods from Claremont Graduate University and an MBA from the University of California Irvine. He graduated from West Point with a Bachelor of Science in Management Studies and Systems Engineering.

Ali Nouri, a molecular biologist, is President of the Federation of American Scientists (FAS), an organization that for the last 75 years has been at the forefront of addressing global risks that range from nuclear weapons to disinformation to pandemics. Dr. Nouri serves on the National Academies of Science, Engineering, and Medicine's Global Diplomacy Roundtable, where he chairs the subcommittee on disinformation. Dr. Nouri has published in the fields of virology, cell biology, developmental biology and public policy. Prior to assuming his role at FAS, Dr. Nouri served in Congress advising Senators Jim Webb and Al Franken over a ten-year period in roles including legislative director, national security advisor, energy and environment advisor, and science and technology advisor. He began his Senate career as an AAAS Congressional Science and Engineering Fellow. Nouri received a B.A. in Biology from Reed College and a Ph.D. in Molecular Biology from Princeton University.

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