

Written evidence to the UN Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression:

The ‘Infodemic’ as a cautionary tale—policy implications of a metaphor

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1. Personal background and expertise

- 1.1 Dr Chico Q. Camargo is a Lecturer in Computer Science at the University of Exeter, a research associate at the Oxford Internet Institute, University of Oxford, and at St Benet’s Hall, University of Oxford, and a Board Member of the Young Researchers of the Complex Systems Society. He is also affiliated to the University of Exeter Institute for Data Science and Artificial Intelligence. In his research, he combines approaches from the natural, social, and computational sciences to study the evolution of information. His work, developed in multidisciplinary collaborations with physicists, psychologists, mathematicians, and political scientists, has resulted in multiple knowledge exchange opportunities with policymakers.
- 1.2 Felix M. Simon is a Leverhulme Doctoral Scholar at the Oxford Internet Institute (OII) at the University of Oxford. He also works as a research assistant at the Reuters Institute for the Study of Journalism (RISJ) and as a journalist for various international outlets. As a member of the Leverhulme Doctoral Centre “Publication beyond Print”, he is currently researching the implications of AI in journalism and the news industry, jointly supervised by Prof Gina Neff and Prof Ralph Schroeder at the OII and funded by the Leverhulme Trust. His research focuses on digital media, political communication, and the transformation of the news.
- 1.3 This submission focuses on two key questions:
 1. Is freedom of expression under threat online?
 2. What legislative, administrative, policy, regulatory or other measures have Governments taken to counter disinformation online and offline?
 3. What has been the impact of such measures on i) disinformation; ii) freedom of opinion and expression; and iii) other human rights?
- 1.4 Instead of addressing these questions directly, we take Question 1 as an opportunity to caution against a scenario—the so-called ‘infodemic’—that might well end up posing a threat to freedom of expression online, if taken as a reason to enact tougher-than-necessary policies to regulate freedom of speech online. Relatedly, in response to Question 2 we will provide a brief overview of unsuccessful and harmful public policies in other countries in direct response to this ‘infodemic’ which have ended up harming freedom of expression online and offline. Our submission will discuss each question in turn before drawing conclusions and providing recommendations.

2. Is freedom of expression under threat online? The ‘Infodemic’ metaphor

- 2.1 In 2020, the term ‘infodemic’ rose from relative obscurity to international prominence. Its origins were fairly inconspicuous, first appearing in a World Health Organisation (WHO) situation report in February 2020. “The 2019-nCoV outbreak and response”, the WHO wrote at the time “has been accompanied by a massive ‘infodemic’—an overabundance of information—some accurate and some not—that makes it hard for people to find trustworthy sources and reliable guidance when they need it.”¹ WHO Director-General Tedros Adhanom Ghebreyesus re-iterated the sentiment two weeks later, saying “We are not just fighting an epidemic; we’re fighting an infodemic. Fake news spreads faster and more easily than this virus, and is just as dangerous”. In the following months, journalists and scientists jumped on the term, discussing the ‘infodemic’ from all possible angles, from healthcare to AI and social media to the importance of libraries. To this day, little has changed in this regard.
- 2.2 It’s no surprise that so much would be written about this issue. Few topics are potentially more serious and threatening than the spread of misinformation during a pandemic. However, all this hype hides a basic problem: few of the contributors to the growing body of work on the ‘infodemic’ have made the effort to ask if the ‘infodemic’ concept makes much sense, and if its underlying claims are properly backed up by science. Unfortunately, there is a lot of research to suggest that neither is the case.

3. The main flaws of the ‘Infodemic’ metaphor

- 3.1 First, while epidemiological metaphors for communicative issues are by no means a new phenomenon, they also quickly run into problems. For instance, real epidemics have a single, well-defined cause—such as a virus whose strains can be sequenced, identified, and traced back. The spread of (mis)information, on the other hand, often involves multiple independent sources: different actors create and disseminate information with multiple intents, aiming to inform, promote alternative versions of a story, and in some cases to harm.^{2,3} This diffuse aspect also means it’s hard to draw a line between what should count as the ‘infodemic’ and what should not. This results in serious and potentially dangerous policy implications, as explained below.
- 3.2 Second, existing evidence suggests that the claim of an overabundance of information should also be taken with caution. Information abundance is a common feature in modern media environments, and while many people perceive information overload, research has also found that many seem to cope well with it. In other words, humans are good at being selectively attentive, and have developed numerous cognitive strategies to deal with too much information over time.⁴ These findings seem to be borne out by preliminary studies conducted at the height of the pandemic in the spring of 2020 which suggest that many people had a good idea of where to look for reliable information around COVID-19. Respondents in various countries stated that, for instance, the news

¹ WHO. (2020). *Novel Coronavirus(2019-nCoV). Situation Report—13* (No. 13). World Health Organisation. <https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200202-sitrep-13-ncov-v3.pdf>

² Vraga, E. K., & Bode, L. (2020). Defining Misinformation and Understanding its Bounded Nature: Using Expertise and Evidence for Describing Misinformation. *Political Communication*, 37(1), 136–144. <https://doi.org/10.1080/10584609.2020.1716500>

³ Metzger, M. J., Flanagin, A. J., Mena, P., Jiang, S., & Wilson, C. (2021). From Dark to Light: The Many Shades of Sharing Misinformation Online. *Media and Communication*, 9(1), 1–10.

⁴ Mercier, H. (2020). *Not Born Yesterday: The Science of Who We Trust and What We Believe*. Princeton University Press.

media have helped them understand the crisis.⁵ They also expressed consistently high levels of trust in (health) experts, scientists and health organisations and said that these helped them to make sense of the situation.⁶ While more research will be necessary to fully understand the scale, shape and effect of the information environment during the pandemic, evidence from cognitive science and communication research makes some of the strongest claims around the ‘infodemic’ at least questionable. From this point of view, assertions that, firstly, there is an oversupply of (mis)information during the current pandemic that differs markedly from ‘normal’ times and, secondly, that people are not able to navigate any oversupply, should be taken with a pinch of salt.

- 3.3 At this stage, we can draw a preliminary conclusion: Despite the catchiness of the term, evidence that the ‘infodemic’ is an observable phenomenon is thin, with existing research painting a more nuanced picture. This creates complications. If claims that the ‘infodemic’ is a true phenomenon in urgent need of addressing are blindly being followed, overbroad and ultimately damaging policies might be the result. In addition, existing research on the nature of mis- and disinformation suggests that neither can be easily reined in with regulatory solutions that solely seek to address them on a technological level, e.g. through tougher content moderation measures or the automatic deletion of content. Instead, any such measures would not only risk affecting content that is not problematic, thus harming the freedom of expression online; they also suffer from the fallacy that problematic content online is a cause for socio-political issues, ignoring that they more often a symptom of the same, suggesting that any solution to them must lie elsewhere.

4. The policy-making risks of the ‘infodemic’ metaphor

- 4.1 Admittedly, metaphors such as ‘infodemic’ can be helpful to make complex issues less abstract. However, crisis and emergency metaphors can not only obfuscate the complexity of a given situation, they also risk enticing policymakers to opt for overdeveloped solutions and potentially provide further cover for political leaders keen to exploit the situation, both potentially resulting in threats to the freedom of expression online. To date, 18 governments around the world have added counter-measures in response to the ‘infodemic’ via decrees and emergency legislation, some of them with the potential to stifle media freedom, freedom of speech and ultimately the health of the public sphere.⁷ In the following, we will briefly outline some of these before concluding with a call for balanced and cautious regulatory approaches when it comes to the regulation of digital spaces.
- 4.2 The most comprehensive overview of legal responses to the COVID-19 ‘infodemic’ to date has been provided by Radu (2020).⁸ In line with other mis- and disinformation

⁵ Nielsen, R. K., Fletcher, R., Kalogeropoulos, A., & Simon, F. M. (2020). *Communications in the Coronavirus Crisis: Lessons for the Second Wave* (p. 26) [Reuters Institute Report]. Reuters Institute for the Study of Journalism. https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2020-10/Nielsen_et_al_Communications_in_the_Coronavirus_Crisis_FINAL_0.pdf

⁶ Nielsen, R. K., Fletcher, R., Newman, N., Brennen, J. S., & Howard, P. N. (2020). *Navigating the ‘Infodemic’: How People in Six Countries Access and Rate News and Information about Coronavirus* (Reuters Institute Report, p. 36). Reuters Institute for the Study of Journalism. <https://reutersinstitute.politics.ox.ac.uk/infodemic-how-people-six-countries-access-and-rate-news-and-information-about-coronavirus>

⁷ Radu, R. (2020). Fighting the ‘Infodemic’: Legal Responses to COVID-19 Disinformation. *Social Media + Society*, 6(3), 2056305120948190. <https://doi.org/10.1177/2056305120948190>

⁸ Ibid.

scholars, Radu argues that many of the ‘specific actions taken during the pandemic build on existing disinformation counter-measures around the world, many of which have not proven their effectiveness’ (p. 2). Worse, several countries including Hungary, South Africa, and Bolivia introduced laws which imposed jailtime for coronavirus mis- and disinformation both offline and online. As Noorlander (2020) observes, restrictions in various Council of Europe member states included ‘the take down of information deemed “fake” or “distorted” and the criminalisation of “misinformation”’, with these regulations either built into temporary state of emergency legislation, or even introduced as permanent new legislation. As Noorlander and Radu document, many of these were overly broad and unspecific in what they target, and carried penalties ranging from hefty fines to prison sentences, thus having a chilling effect on freedom of expression and the free flow of information.⁹

- 4.3 To summarise, rather than providing examples for successful public policy, we argue that just much can be learnt from unsuccessful and/or misguided public policies in other countries. Even when introduced with the best of intentions (a presumption of innocence which not necessarily extends to some of the states which have introduced measures as the ones specified above), measures aimed at safeguarding the public from harmful information online can easily end up having a detrimental effect on freedom of expression online. In addition, in only tackling the symptoms such measures risk carrying only marginal benefits (if any), as the underlying causes of mis- and disinformation remain unaddressed. The UK should treat these responses to the ‘infodemic’ as a cautionary tale when it comes to regulatory approaches around the freedom of expression online.

5. Conclusion and Recommendations

- 5.1 It is clear that unreliable information around health events can have real consequences, especially now as so much depends on the public’s trust in science and the effectiveness and safety of any vaccine. But as convenient as it might be to use the language of epidemiology to explain communicative phenomena, an ‘infodemic crisis’ validated by scientists and the media might result in solutions that ignore the real problems and structural origins of problems such as vaccine misinformation, or mis- and disinformation more broadly. This can lead to ineffective policies at best, and on encroachments on human rights such as freedom of expression at worst, for instance, when overbroad measures aimed at curbing the spread of mis- and disinformation end up limiting people’s ability to express themselves freely and harm their opportunities to voice justified criticism and scepticism.
- 5.2 With that in mind, scholars, journalists, and policymakers should not only embrace caution and rigour in the language and metaphors they generally choose to adopt, but also retire the term ‘infodemic’ in favour of more specific and accurate existing terminology. More importantly, however, the so-called ‘infodemic’ and some of the policy responses it has spawned in various countries should remind regulators of the need to tread with caution when it comes to regulating online spaces. For one, the thin evidence for an (ongoing) ‘infodemic’ should be taken into account when the same is called upon to demand tougher restrictions on freedom of expression on the web. Second, any measures should be designed in consultation with various stakeholders (e.g. the news media, human rights groups, academics), tackle the various root causes of mis-

⁹ Noorlander, P. (2020). *COVID and Free Speech: The impact of COVID-19 and ensuing measures on freedom of expression in Council of Europe member states*. Council of Europe Background Paper. <https://rm.coe.int/covid-and-free-speech-en/1680a03f3a>

and disinformation and not just instances of the same, and strive to protect freedom of expression through proportionality, transparency, and an ongoing, evidence-based review of their justifiability and necessity.

6. Declaration

- 6.1 This submission mainly draws on research we conducted at the Oxford Internet Institute, University of Oxford. The authors have no conflict of interest to declare. These comments represent our personal views and we are not here commenting in any official or representative capacity.

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