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The COVID-19 infodemic

"We're not just fighting a pandemic; we're fighting an infodemic," said Tedros Adhanom Ghebreyesus, WHO's director-general, at the 2020 Munich Security Conference. Fake news, misinformation, and conspiracy theories have become prevalent in the age of social media and have skyrocketed since the beginning of the COVID-19 pandemic. This situation is extremely concerning because it undermines trust in health institutions and programmes. On June 29, WHO formally began the conversation on the global effects and management of infodemics with its 1st Infodemiology Conference that convened international experts from diverse scientific and political backgrounds.

Immediate and widespread sharing of medical and other scientific information outside of expert circles before it has been thoroughly vetted (eg, preprints) can be dangerous, especially in a pandemic. A pandemic is a rapidly evolving setting, in which researchers and medical professionals are constantly learning and contributing to dynamic adjustments in government policy. Compounding this information vortex is the fact that governments rarely make policy decisions solely on the basis of empirical evidence; political interest is key, and the two are frequently at odds. Governments want to be perceived as being in control and are too quick to provide false reassurances, as Saad Omer, director of the Yale Institute for Global Health, pointed out in one of his Infodemiology Conference talks. Consequently, incoherent government messaging and reversals in recommendations on the basis of newly emerging evidence, for example on whether masks are protective against transmission, can be misconstrued as incompetence. Comparisons have been drawn between solid leadership based on clear communication, empathy, and alignment of science and politics, such as that shown by New Zealand's Prime Minister Jacinda Ardern or German Chancellor Angela Merkel, and shambolic, self-serving, and sometimes deliberately misleading reactions, such as those of US President Donald Trump or Brazilian President Jair Bolsonaro. Such miscommunication is not helped by mass media, which are often guilty of favouring quick, sensationalist reporting rather than carefully worded scientific messages with a balanced interpretation. The outcome is erosion of public trust and a sense of helplessness, the perfect conditions for the spread of harmful misinformation that begins a vicious circle.

We and many other journals have found ourselves at the centre of the infodemic. Never before has the output of medical journals been subject to such scrutiny. From impartial communicators of peer-reviewed reports, our editorial identities are now conflated with the content that we publish because we are reaching experts and non-experts alike in an emotionally charged global environment. Although we have long worked with authors and media outlets to create factually correct, unbiased stories fit for public consumption, perhaps now is the time for a more proactive response. Journals (including this one) should consider actively countering misinformation about themselves and the work that they publish.

Misinformation confuses by diluting the pool of legitimate information. Conspiracy theories work because they provide the comfort of an explanation in times of uncertainty and anxiety. Their messaging revolves around core emotions and values and hijacks the mental cues that we use to decide whether the source is legitimate and thus trustworthy. The most pervasive and damaging of conspiracy theories incorporate grains of truth. But who benefits from this misinformation? Claire Wardle, co-founder and director of FirstDraft identifies three aspects: financial gain, political gain, and experimental manipulation. The anti-vaccination industry is a notable example of the first: a report from the Centre for Countering Digital Hate shows that wellness and nutritional supplement companies are major backers of, and directly profit from, anti-vaccination campaigns. Worse, anti-vaccination content reaches up to 58 million online followers and is deliberately retained by social media giants, creating a cumulative advertising revenue of US\$1 billion. Unfortunately, as a UNICEF analysis of the so-called Peshawar incident of April 22, 2019, shows, hesitancy against one vaccine is quickly transposed onto all vaccines and is excruciatingly difficult to reverse. None of this bodes well for the acceptance of vaccination against COVID-19.

A state of affairs cannot continue where, for example, the very existence of the COVID-19 pandemic is denied. Immediate, coordinated action is needed from the global political, corporate, and scientific community to maintain the integrity and credibility of professional expertise and rebuild public trust. ■ *The Lancet Infectious Diseases*



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For the annual **Munich Security Conference** see <https://securityconference.org/en/>

For **Saad Omer's Infodemiology Conference lectures** see https://www.youtube.com/watch?v=uwy_SMZ3zN0 and <https://www.youtube.com/watch?v=yaiZdu-4i64>

For **why conspiracy theories work** see <https://www.washingtonpost.com/outlook/2020/05/05/coronavirus-conspiracy-theories-pandemic/>

For **Claire Wardle's Infodemiology Conference lecture** see <https://www.youtube.com/watch?v=j1G5B8j5UG8>

For **FirstDraft** see <https://firstdraftnews.org/>

For **examples of misinformation for political gain** see https://www.euronews.com/2020/07/06/state-sponsored-disinformation-in-western-democracies-is-the-elephant-in-the-room-view?mc_cid=8df868d750&mc_eid=6919eb05a1 and <https://www.codastory.com/disinformation/yemeni-doctor-disinfo/>

For the **report by the Centre for Countering Digital Hate** see https://www.counterhate.co.uk/anti-vaxx-industry?mc_cid=740d9a3543&mc_eid=6919eb05a1

For the **UNICEF analysis of the Peshawar incident** see <https://www.youtube.com/watch?v=IAdG3-Pevnl>