Governmental actions to address COVID-19 misinformation

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Abstract
Since COVID-19 emerged, a plethora of misinformation has undermined the public’s ability to identify reliable sources of accurate information. To identify the range of methods governments used to address COVID-19 misinformation, we conducted a content analysis of international media and evaluated government actions in light of international law, which protects freedom of expression and calls on governments to guarantee this fundamental right even during a pandemic or other emergency. We identified five categories of government activities: (1) disseminating and increasing access to accurate information; (2) restricting access to accurate information; (3) disseminating disinformation, false information, and misinformation; (4) addressing commercial fraud; and (5) criminalizing expression. The goal of addressing COVID-19 misinformation is best served by protecting expression, disseminating factual information, ensuring strong protections for whistleblowers, and supporting an independent media environment. Conversely, governments undermine public health when they create a state of uncertainty and violate human rights.

Keywords COVID-19 · Freedom of expression · Information · Misinformation · Disinformation · Commercial fraud

Introduction
Along with the COVID-19 pandemic, the World Health Organization (WHO) identified a “massive” global “infodemic” that it defined as an overabundance of both accurate and false information that makes it difficult to identify trustworthy sources and reliable information about the virus [1]. The proliferation of misinformation can
create panic and threaten public health by undermining confidence in science, health systems and workers, government institutions, and public health recommendations [2–4]. For instance, hundreds of people died and thousands were poisoned in Iran after consuming toxic methanol alcohol under the erroneous belief it cures COVID-19 [5].

To address the problem of COVID-19 misinformation, some governments prioritized the dissemination of accurate information; others, however, arrested and prosecuted citizens and journalists who publicly discussed the virus or government officials’ handling of the pandemic. Yet, international law protects freedom of expression, and prosecution over speech elicits human rights concerns.

The Universal Declaration of Human Rights has protections for freedom of expression [6] that were given legal force through Article 19(2) of the International Covenant on Civil and Political Rights (ICCPR), which states: “Everyone shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of his choice [7].” (See Supplementary Material, Appendix 1 for the full text of Article 19 of the ICCPR.) The European Convention for the Protection of Human Rights and Fundamental Freedoms, American Convention on Human Rights, African Charter on Human and Peoples’ Rights, and Association of Southeast Asian Nations’ Human Rights Declaration, among other instruments, also affirm the right to freedom of expression [8]. International protections of expression universally translate into a set of strongly held rights: the right to hold opinions, the right to express viewpoints of all types, the right to access information held by public authorities, and the right to receive information through all media; these protections hold true for private citizens as well as journalists [9]. As such, Article 19 does not distinguish among media types or platforms and is based on a recognition that an independent, uncensored, and unhindered press is essential to the free exercise of these rights [9]. To fulfill the right to access information, governments should require disclosure of information in the public interest, whether requested by citizens or not, and protect whistleblowers who release such information [10].

Yet these rights are not absolute. Article 19 of the ICCPR does not protect commercial fraud, defamation, hate speech intended to incite violent behavior, incitement of war, or threats to national security [7]. During a state of emergency “that threatens the life of a nation,” Article 4 of the ICCPR permits states to “derogate” or deviate from their obligations “to the extent strictly required by the exigencies of the situation [7].” However, derogation of Article 19(2) is not considered necessary to address COVID-19 misinformation. The United Nations special rapporteur on the protection and promotion of the right to freedom of opinion and expression explained that even if COVID-19 threatens the life of a nation, states should rely on the limitations set forth in Article 19 itself, rather than use Article 4 as a means to derogate from their obligations to protect expression [11].

Article 19(3) outlines permissible limitations on freedom of expression, specifically that it may only be subject to restrictions “provided by law” and “necessary” for the protection of national security or of public order, or of public health or morals [7]. This provision requires that any limitation must be clearly set out in law
in terms of scope, meaning, and effect so individuals can regulate their actions to avoid violations. Thus, vague provisions giving broad or discretionary authority to officials are not sufficient [11]. Second, the limitation must be necessary and proportionate to the threat to national security, public order, public health, or morals [11]. Any restriction on the exercise of free expression must therefore be “strictly required by the exigencies of the situation [11]” and “may not put in jeopardy the right itself [9].” In summary, any limitation on the freedom of expression for public health purposes must meet the tests of necessity and proportionality, be aimed only towards a legitimate objective, and not undermine the right to expression itself [11].

During the COVID-19 pandemic, the onus was on governments seeking to limit expression to establish a direct and immediate connection between the expression and the threat, and any restriction should have been “the least intrusive instrument” to protect national security and public health [9]. There is, however, a gap in knowledge about whether countries abided by their obligations under the ICCPR during the pandemic and how, practically, they sought to address COVID-19 misinformation. In an effort to identify the range of methods governments used to address COVID-19 misinformation, we conducted a content analysis of international media and classified and evaluated government actions in light of international law.

Methods

Between April 6, 2020 and May 23, 2020, using Google and Google News, we systematically researched international news published in English using the following keywords: COVID, government, misinformation, disinformation, false information, fake news, fake cures, rumor, arrest, and prosecution. We conducted a similar search using LexisNexis International News using keywords: government, misinformation, and COVID-19. Because LexisNexis provides results by relevancy, we reviewed 700 records, stopping our review after finding no new or relevant news stories in the final 100 records. We collected hundreds of news stories published between February 2, 2020 and May 13, 2020. We did not intend for our search to be exhaustive in terms of finding every governmental response to COVID-19 misinformation. Instead we sought to identify the range of methods governments used to address COVID-19 misinformation. We classified the results and evaluated governmental responses against the framework of Article 19 of the ICCPR.

Results

Table 1 sets forth the definitions we use in this paper. From our evaluation of media, we identified the following five categories of actions that governments and officials have taken related to COVID-19 misinformation: (1) increased access to accurate information; (2) restricted access to accurate information; (3) disseminated disinformation, false information, and misinformation; (4) addressed commercial fraud; and (5) criminalized expression. Examples of actions within each category and their
implications for freedom of expression are set forth here. (See Supplementary Material, Appendix 2 includes references to the news stories in the results.)

First, governments increased access to accurate information by disseminating factual information, engaging in media or digital literacy campaigns, or funding or working with outside entities to further these goals. For example, in Taiwan, the government held daily press conferences, disseminated newsletters, worked with media companies to broadcast preventive information, and worked with the civil sector to launch public maps providing locations of supplies and services. Taiwan also established the “Taiwan FactCheck Center” that verified accuracy of information provided online within 60 min and immediately clarified the messaging to the public. In Ethiopia, when a person placed a telephone call, the caller received an educational message in Amharic about COVID-19 prevention (for example, wash hands, stay ‘two steps away’ from someone coughing). The United Kingdom promoted a media literacy campaign that included a checklist of five considerations before sharing information (SHARE): Source (trusted?); Headline (read beyond); Analyse (fact check); Retouched?; Errors (grammar, spelling). Officials in South Africa and Nigeria worked with WhatsApp (the most popular social media platform in Africa) to provide users in those countries with

| Table 1  | Definitions                                                                 |
|----------|-----------------------------------------------------------------------------|
| Commercial fraud | False, deceptive, incomplete, or misleading expression used to promote products or services that do not perform as advertised and thereby encourage reliance on the expression to engage recipients in a commercial transaction that results in a loss for the purchaser [12] |
| Disinformation | Misinformation intentionally designed to be false, manipulated, or misleading [13] |
| Disinformation propaganda | The purposeful and widespread dissemination of information on a topic of public interest known to be false with the intention of generating insecurity, tearing cohesion, inciting hostility, or disrupting democratic processes; may use automated dissemination techniques to amplify the effect of the communication [3, 13] |
| False information | Information presented as fact that has been disproven as inaccurate or not truthful |
| Misinformation | Umbrella term to cover all inaccurate or false information or information of unknown accuracy, transmitted through any means |
| Propaganda | The use of unethical persuasion techniques on matters of public interest (politics, health, environment) that aim to influence societal processes and gain geopolitical advantage [13] |
| Rumors | The term “rumor” is connected to an extensive local vocabulary and circulation of information; rumors may or may not be false. Rumors include the dissemination of information within a community through word-of-mouth and online social networks but can also be disseminated through other means and beyond one’s community and network [14] |
| Whistleblower | A person who exposes information they reasonably believe, at the time of disclosure, to be true and to constitute a threat or harm to the public interest, such as a violation of law, abuse of authority, waste, fraud, or harm to the environment, public health, or public safety [10] |
information on the virus and how to avoid infection. These governmental efforts aligned with the right to receive information through various media sources and the right to access information held by public authorities [15]. In these instances, states abided by their obligation to disseminate information held by government authorities that was in the public interest [9]. Governmental efforts to increase media and digital literacy, and the use of audio communication in local dialects, further supported this right.

Second, in direct contradiction to the Article 19 values described above, some governments restricted access to accurate information by blocking or refusing to release factual information, or restricting journalism, the press, or communication by health officials and whistleblowers. The first case occurred when authorities in Wuhan, China, silenced Dr. Li Wenliang, the physician who initially warned others about a possible new coronavirus strain [16]. In Belarus, journalists reported that information provided by the government was incomplete and lacking data, and that officials ignored formal requests for information and “built a ‘wall of silence’” to suppress information about COVID-19. Countries also broadly restricted the press. For example, Aruban and Peruvian authorities fined or detained journalists reporting on COVID-19 for not abiding by curfews. Kuwait prohibited the printing and distribution of newspapers based on the rationale that it was necessary to protect those handling the paper (readers) from the virus even though decontamination procedures were in place.

Officials also blocked dissemination of factual information, thereby interfering with the public’s right to information held by public authorities, by firing, prosecuting, or otherwise failing to protect health authorities or whistleblowers who tried to communicate information. For example, Bosnian officials criminally charged a doctor for posting on social media that a local hospital lacked ventilators and other equipment. The president of Brazil fired the minister of health, who was vocal about the benefits of public health preventive measures. In the United States (U.S.), the government removed two high-level federal health officials from their positions after they reported testing delays and shortages of medical supplies in U.S. hospitals, or disagreed with the president’s recommendations about the benefits of hydroxychloroquine.

In these cases, government restrictions undermined the right to expression itself as the restrictions on expression were not necessary or proportionate to the public health threat, and were not aimed at attaining legitimate public health or national security policy objectives [11]. Nor were broad restrictions on the press “the least intrusive instrument” government could have used for any legitimate outcome. The right to information is especially strong when the information is in the public interest; therefore, this right extends to information held by whistleblowers [10]. International law favors the protection of whistleblowers, broadly defined to include public health experts and medical providers. By silencing these actors, governments violated their obligations under the ICCPR and undermined public health.

Third, in contradiction to their obligation to disseminate factual information to the public, governments disseminated disinformation, false information, and misinformation directly. Country leaders in the United States, China, Russia, and Iran accused each other of engaging in disinformation propaganda in the global fight to
frame the narrative surrounding COVID-19. For example, Iran’s Ayatollah Khomeini referred to the virus as a biological attack. Government officials also disseminated misinformation about the virus and unproven or untested treatments or preventions. For example, the governor of Nairobi, Kenya distributed bottles of cognac as part of relief efforts, stating that research conducted by WHO and other health organizations found that alcohol killed the virus.

The president of Madagascar broadcast his support for an herbal tea, Covid Organics, that he said cures the virus in days; the government required the tea to be consumed by public school children, distributed it throughout Madagascar, and donated it to several African countries. The U.S. president suggested that ingesting hydroxychloroquine and injecting disinfectant, light, or heat might prevent or cure COVID-19. Such disinformation campaigns reach large populations, distort public discourse, and politicize health and science [13]. Disinformation spread by government officials is especially problematic because people generally expect governments to provide factual information so their reliance on government-generated misinformation can be expected. Despite the fact that these leaders’ statements arguably undermined national security, public order, and public health, government officials’ speech in the context of their positions is generally considered protected expression under international law and any government obligation to address such false information is hindered by the leader’s role in their governments.

Fourth, governments used administrative and criminal enforcement strategies to address commercial fraud for fake COVID-19 preventions and cures. The use of false advertisements and labels to sell fake products is a form of commercial fraud and not protected expression. In the United States, federal administrative agencies issued warning letters to companies selling fake products, and state attorneys general brought actions against entities for violating state consumer protection acts. The European Union’s law enforcement agency, Europol, identified and took down 2,500 online links to COVID-19 websites, marketplaces, and advertisements, and seized 4.4 million units of fake pharmaceuticals. Consumer protection laws are vital to protect public health, particularly during a pandemic so consumers are not defrauded into purchasing ineffective, unsafe, or harmful products [11]. In addition to the potential for harm, these products may undermine uptake of evidence-based public health measures. In these cases, governments acted according to their responsibility to protect the public from false advertising and labeling intended to sell fake preventions and cure that could undermine health.

Fifth, governments prosecuted citizens and journalists and enacted new laws criminalizing expression about COVID-19 or the government’s response to it. Using cyber misuse laws, penal codes, and criminal defamation laws, officials in Kenya prosecuted a popular blogger for posting information about COVID-19 deaths on social media; officials in the Philippines arrested people for allegedly spreading false rumors about COVID-19 in their local neighborhoods; and Sri Lankan authorities arrested people for criticizing public officials’ response to the pandemic. Journalists were similarly sanctioned. Cambodian authorities arrested the director of a news site for accurately reporting the prime minister’s statements made during a press conference. Iraq’s media regulator fined Reuters and suspended its license for reporting COVID-19 statistics in violation of its media broadcasting rules. In Serbia, police
arrested a journalist for her article reporting on a lack of personal protective gear, sanitary materials, and medicine in a hospital.

Countries also enacted new emergency laws in response to COVID-19 under which they criminalized the dissemination of information. For example, in March 2020, the interim president of Bolivia signed an emergency decree criminalizing acts that “misinform or generate uncertainty to the population.” Botswana’s April 2020 Emergency Powers (COVID-19) Regulations criminalized relaying “any information to the public about COVID-19 from a source other than the Director of Health Services” or the World Health Organization. Hungary’s parliament passed an emergency law that gave the prime minister powers to rule by decree and penalize people who spread “fake news” about the virus or measures against it. The Philippines “Bayanihan to Heal as One Act” penalized “creating, perpetrating, or spreading false information regarding the COVID-19 crisis.” And Zimbabwe enacted a regulation clarifying that the government could prosecute “any person who publishes or communicates false news” about officials enforcing the national lockdown. People prosecuted under these countries’ new laws could be fined and imprisoned for up to 20 years.

The use of existing and new laws to criminalize speech about the pandemic did not meet the requirements under Article 19(3) of the ICCPR for restricting expression and often undermined free expression. Prohibitions in emergency decrees were vague and provided broad authority to government officials to determine if a violation occurred. These fail to set forth the scope or meaning of prohibitions and, as such, were insufficient under international law [11]. Governments act contrary to international law when they criminalize journalism or prosecute expression that is truthful or that criticizes government [9, 11]. Moreover, imprisonment is rarely a proportionate response to concerns over expression [9, 11].

Discussion

All countries identified in this study have either ratified, accessioned, succeeded, or signed the ICCPR [17]. Accordingly, countries previously adopted laws of various strengths to protect free expression, including the right to information in the public interest held by public authorities [18]. Some countries embraced free expression and their role in disseminating factual information (for example, Taiwan), but many countries veered from these commitments in the name of addressing COVID-19 misinformation. The examples we identified indicate that departure from international law was not necessary to address the public health crisis and the methods used (criminalization of speech, suppression of factual information, disseminating disinformation) were not proportionate to the public health threat and likely exacerbated the crisis. Governments impeded their own ability to respond to the pandemic and COVID-19 misinformation by disseminating false information and creating an environment of fear to communicate and uncertainty over the facts related to the virus. Their acts undermined public health and enhanced people’s need to seek information from less reliable sources, such as on social media.
Government perpetuation of disinformation and suppression of factual information are serious issues. This behavior is difficult to stop as a practical matter because international law protects political expression and leaders play a primary role in such activities. Countries can help prevent a government-created misinformation environment by establishing independent health agencies free from political interference and by protecting the agencies’ abilities to communicate scientific information to the public. Additionally, accurate reporting by reputable journalistic sources is one of the most powerful tools to reduce misinformation and address disinformation [15]. The press plays an essential role in exposing government malfeasance and communicating accurate information while also providing a link between citizens and elected representatives. In this way, journalists can highlight government activities and identify policy or institutional failures to pressure government to take corrective measures. Governments should avoid any actions that harm the ability of the press to fulfill this role.

Especially alarming was the criminalization of expression and prosecution of citizens and journalists for disseminating truthful information or criticizing public officials. The ability to criticize government is a fundamental aspect of maintaining free expression (and a democracy) and silencing these voices inherently undermines Article 19 rights [9]. Government should instead use its bully pulpit to publicly counter misinformation about its own activities.

Against the background of governmental human rights violations, non-governmental organizations played a key role in disseminating factual and reliable information that prioritized audio communication in local dialects. For example, the United Nations worked with traditional storytellers in Chad, called troubadours, to travel to remote areas in eight provinces that lack access to radio or internet to orally transmit factual and reliable information in local dialects about COVID-19 and “healthy habits” [19]. DW-Akademie, Germany’s international broadcaster, worked with local citizen radio stations in remote villages and refugee camps in Bangladesh and Guatemala to orally disseminate factual information about COVID-19 and handwashing through loudspeakers mounted on motorized rickshaws [20, 21]. In Guatemala, DW-Akademie worked with Radio Sónica, to educate youth to not disseminate misinformation online and to create COVID-19 informational podcasts translated into indigenous Mayan languages [22].

Strengths of this study included the review of hundreds of news stories using two different search engines during the pandemic to identify methods governments used to address COVID-19 misinformation against the requirements of international law. Nonetheless, we may have failed to identify all methods governments used to address COVID-19 misinformation. Other limitations include not verifying the accuracy of news stories nor capturing news published in non-English media nor methods used to suppress expression prior to or not directly linked to COVID-19, such as police attacks on reporters [23], internet blockages (e.g., in Ethiopia’s Oromia region [24]), or blocking importation of paper and ink (e.g., Nicaragua [25]). We also did not research government’s response to, or use of, hate speech, which is directly related to Article 19 and addressed in Article 20 of the ICCPR [15].
Conclusion

Censorship—just like misinformation—undermines public health; both create a state of uncertainty and reduce truthful communication, while motivating people to seek out information from less transparent venues. International law requires government to protect expression and independent journalism, and actively disseminate factual information in the public interest. In the face of a pandemic, governments should refrain from disseminating disinformation and taking coercive measures, such as criminalizing expression. Governmental activities in the name of addressing misinformation often undermined public health and the public’s ability to identify factual information about the pandemic.

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