Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Introduction

Beware of false prophets, which come to you in sheep’s clothing, but inwardly they are ravening wolves

Matthew 7:15

The original severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) also known as coronavirus disease 2019 (COVID-19) spread from China to other neighboring countries to then relentless reach Europe, Italy, and Spain first, and later the United States and the rest of the World. Initially thought to be a different form of flu, drawing increasing media attention in February 2020 was soon to be declared a pandemic by the World Health Organization (WHO) in March 11, 2020 changing the world situation and creating a surreal scenario that continues up to date. Media interest towards the health situation was in crescendo. Data coming from health authorities, official organisms, scientists and experts were showing signs of concerns on the rapid rise of infectiousness in the population. Journalism took the position as witness and herald of the communication and discovery of risks associated to the virus and the historical milestones created by a health emergency have never experienced before. And then, it came the confinement, the social alarm in some countries where governments struggled to enforce policies and emergency laws while trying to maintain a decent socio-economic environment. The financial turmoil affected also the press and the media, as some newspapers and communication companies ordered their staff to telework, closing newsrooms and offices, along what was being experienced in other aspects of life such as schools and business in general. The world stopped in disbelief. The COVID-19 pandemic assaulted us by surprise, unprepared, and uncovered miscoordination of agencies and entire governments.

But a worse enemy was yet to be discovered: disbelief, human arrogance, and vested interest. These factors accompanied and altered many decisions, information, and policies and determined actions that would lead to major changes in our way of life.
In this historical scenario, and more than ever, journalism has given the role and responsibility to be the herald of the information for the public. COVID-19 pandemic has served as a motive for media evolution. Freelancers and war journalists have turned into video calls, home reporting, and “out-of-field” communication. The dynamics of journalists have changed, and in some instances, the reach to the reader or listener has evolved in a way that maintaining rigor and accuracy has become a challenge by itself.

The essential role of the journalists in the society rests in their ability to present facts and contrasted information without bias or influences. But social networking and multimedia platforms present the risk of easy mass transmission of unfiltered information. The appearance of these modern communication methods has brought the option of delivering non-contrasted information to the public. How to know what information is or is not a hoax? How to contrast news or information? Can we eradicate the so-called “fake news”?

The concept of “fake news” is deceiving by itself. The meaning of “news” implies to be truthful. That is to say, the word “news” by its definition carries veracity of what is told, and therefore we should not deteriorate the concept “News-News” with the adjectives “true or false”. Therefore once referring to “fake news” the term false information or hoax must be kept handy.

During the pandemic, we have witnessed an outbreak of hoaxes and out of context information in health, drug industry, politics, finances, and government policies, together with many indirectly associated but related issues such as police actions, protests, nutritional support, and environmental requests.

Media plays a crucial role in creating a globally informed society, and journalism carries the responsibility of playing that role. It is exactly that professional attitude is an important quality that separates true journalist from writers of the news or facts, as it was reflected in the words of the Minister of Defense of the Spanish Government, Margarita Robles: “Journalism is more necessary than ever and citizens value its public service role. They are the oxygen of democracy, their role as informants, and public opinion makers makes them essential. For this reason, at this time is when it is more necessary for the media to exercise journalism responsibly, providing information of general and proven interest.”

The digital transformation of the media. A compromised quality?

COVID-19 pandemic has marked a paradox for media companies around the world: while the coronavirus outbreak has drawn attention and there has been a significant increase in news consumption, the economic impact of the crisis has forced the companies to accelerate their digitization and to reduce their workforce.

The pandemic has not done but, as in so many other sectors, accelerate changes that would have occurred in the same way, but more slowly. “The bottom line is that we see an accelerating movement towards digital media and media on mobile
devices and various types of platforms,” says Rasmus Kleis Nielsen, the director of the Reuters Institute. “This is accompanied by a continued decline in confidence in the news and a growing concern about misinformation, particularly on social media and by some politicians.”

The business prospects for media corporations are not good: when most of them had still not managed to recover from the 2008 crisis, there is another dramatic drop in advertising revenue. Around the world, leading newspapers have opted for subscriptions for their digital platforms. For most companies, this has become an essential source of income to sustain their independence and maintain their plurality.

The difficult task now lies ahead of convincing readers that independent press is not synonymous with free press, and that subscription modalities are a need, not a donation. The aforementioned drop in revenue from conventional advertising and the cannibalization of revenue that social media platforms do with media-generated content have created a critical situation, forcing publishers to insist on the cost of creating news under high journalistic standards. In the opinion of Adrienne Lafrance, deputy director of The Atlantic, “it will be crucial to diversify the sources of income although a subscription model ensures you a base of readers that value what you do best.” Lafrance believes that this “vicious circle” reinforces “the need to serve the public while encouraging quality journalism.”

The so-called philosophy of “everything for free” installed on the Internet has proven unfeasible for media with high-quality standards. The increasing quantity of information does not reflect pluralism by itself, but rather a dramatic decrease in quality: junk information and “clickbait,” as denounced by José Miguel Mulet Biochemistry and Molecular Biology professor at the University of Valencia and renowned scientific divulgator.

**Paywalls**

Media corporations are betting into direct subscriptions as way of financing. This method separates the practice of the most common digital platforms that offer free content and subsidize their operations with advertising.

There are several models for financing media companies, all sharing the common denominator of seeking independence from advertisers and agencies and establishing a link with their readers. The traditional advertising model has been falling for years, and everything indicates that this year it will do so even more: according to a report by IAB Spain and PwC, most sectors have cut their advertising investment in digital media as a result of the coronavirus crisis.

Paywalls can be divided into five types:

1. **Closed**—simply pay to enter the newspaper’s website or media website and consult any type of news item, regardless of its type or relevance.
2. Limit of readings—it allows a limited number of readings or limits the number of words by article or content. When the limit is reached, the subscription is requested. This is becoming the most popular pay limiting system.

3. Dynamic—the combination of several types of paywalls. They can choose to open some articles and close others while, the website obtains information of the reader, choosing the right moment to offer the subscription and or exposing them to “targeted advertising.”

4. Support or advantages—uses the need for independence as the motive and request the reader to support the media to avoid advertising. Essentially, it is a pay for eliminating advertisements. It can also include additional advantages such as subscriptions to other media, access to online sources, etc.

Social media and hoaxes

A great part of the digital transformation of the media is the appearance of social networks, nominated as winners of the dissemination of hoaxes. This is one of the conclusions reached by a group of researchers from the University of Navarra and the Barcelona Supercomputing Center, when analyzing the health hoaxes disseminated during the first month of state of alarm in Spain.

Hoaxes about the coronavirus are being disseminated mainly on closed messaging platforms or social networks, especially on WhatsApp. It has also been observed that counterfeit content is detected, as the pandemic, in addition to generating a large number of hoaxes about health and science, it has also facilitated the dissemination of numerous false political and financial claims.

Hoaxes on science and health issues are often generated in foreign grounds, while those of political nature although using the pandemic as a noisy background are typically domestic in origin. Identity theft is a common mechanism in hoaxes: they try to deceive citizens by making them believe that their content originates in credible institutions or authorities. Some hoaxes might be close to become fraudulent and concerns exist about their potential use as a weapon to create financial instability.

According to the mentioned study, hoax is defined as “all content that is intentionally false and appears to be true, conceived in order to deceive the public, and publicly disseminated by any platform or social communication medium.” It also establishes a typology in which four types of hoaxes are identified: joke, exaggeration, decontextualization, and deception. From these four types, the researchers propose a “diagram of the severity of hoaxes,” which indicates them as more serious the higher level of falsehood and willfulness in their dissemination.

The dissemination of hoaxes and information of a xenophobic and offensive nature on social networks began to force multinationals to position themselves. In June 2020, The Coca-Cola group placed all its advertising on social media on hold for at least 30 days, a move that was followed by several companies in the wake of racial protests in the United States and the rest of the world. According to CNBC,
James Quincey, CEO of Coca-Cola Corporation stated: “… We will use this period to reassess our advertising policies and determine what revisions are needed. We also expect greater accountability and transparency from our partners in social networks.” “There is no place—he added—for racism in the world, and there is no place for racism on social networks.”8 The company explained that the measure was in support of the boycott to Facebook promoted by various civil rights organizations. The suspension of paid advertising on social networks was also announced by the Unilever group, manufacturer of brands such as Dove, Ben & Jerry’s and Hellmann’s, as well as the Levi Strauss & Co.

Enrique Dans, an expert in communication and technology, points out examples of the dangers of viral transmission of messages in social media, as occurred in India in 2018 where several attacks took place in different areas of the country after messages forwarded by WhatsApp that warned against alleged networks of people who tried to kidnap children to sell their organs. After that, as reflected by the Indian newspaper Business Standard, Facebook limited the forwarding of messages in WhatsApp, decision that has been accompanied by more than 70% reduction in the dissemination of potentially dangerous messages.9

The value of true information

We previously stated the concern that the public has regarding the veracity of the information. In a similar fashion, the journalist must be always in the search for contrasting the confirming sources and details. That cannot be done without a major investigational effort. Searching and researching is the only way to provide accurate and contrasted information. A rigorous analytical process must prevail as the executional mode for true journalism. From the media corporation standpoint, resources and time must be placed at the disposal of the journalist, while securing external sources that will allow for the contrast of information. As all this comes to a cost, and considering the difficulties associated with the current pandemic and the financial shortages that most media have experienced, it is not uncommon that some news might hit the public without the completeness process that they pertain. Those “fake news” hit the audience provoking repercussions at all levels of the society.

Therefore journalism must be not only the guarantor of the news but also the prossector of the “fake news.” In May 2020, the United Nations launched an initiative named “verified” to fight against “fake news” advocating at the same time for a serious source verification and contrasting any news regarding the pandemic. Mr. Antonio Guterres, the Secretary-General of the United Nations, affirmed that “we cannot give up our virtual spaces to those who traffic in lies, fear, and hatred. Disinformation spreads online, in messaging apps, and from person to person. Its creators use intelligent methods of production and distribution. To counter it, scientists and institutions like the United Nations need to reach people with accurate information they can trust.”10
The initiative is centered around three areas of information:

- Health and science—to save lives;
- Solidarity—to promote local and global cooperation; and
- Solutions—to advocate for support to affected populations.

To guarantee this project, the United Nations has made a call for global volunteers to register as informants enabling them to provide and share information with friends and family. This process will form a myriad of information teams, described as digital emergency teams. These volunteers will receive a daily verified information content package that can be easily shared helping the fight against fake news while filling information gaps.

The project will partner with influencers, civil authorities, businesses, the media, and social media to distribute its content and to help to extinguish harmful claims about COVID-19.

Even prior to this pandemic, the European Union (EU) had worked on the transcendence of bad information or intentional hoaxes and tried to establish instruments to counteract its proliferation.

During the pandemic, more than ever before it has become evident that the cost of being misinformed is too high. For a long time, it has been taken for granted that non-informed people were misinformed due to lack of access to the truth. However, it is becoming more evident that it is due to an excess of circulating misinformation. Truthfulness and information have become commodities as scarce as “drinking water amid a flood.”

True information comes not only by the description of the facts but also on the contextualization. As stated by Marta García in El Confidencial, our impulse to believe certain things is stronger than our capacity to change our opinion. This is even more noticeable in our rapidly changing environment. Then it is growingly important to understand that the fight against misinformation cannot be fought with simple facts and headlines.

Tools against false information

Everything said above, the verification of the news to date passes through the rigor of the professional. However, ensuring the truthfulness of the information is as important as guaranteeing that false news do not get published, for which anticipation is required. For that reason, in an attempt to provide resources beyond the human professional alone, some platforms have emerged. One of them, Eventum contracts people to verify news and data and applies advanced algorithms to reduce and eliminate fake news. In tests carried out on its alpha network, the Eventum platform managed to identify stories with “fake news” in less than 3 min. As explained by Martín Milken, one of the partners of Eventum: “Our network uses a combination of three elements: incentivized collective collaboration (crowdsourcing), an advanced algorithm, and blockchain technology. The combination of the three allow us to detect false news quickly and cheaply.”
Policies and regulations

Even before the pandemic, a major concern existed among members of the EU regarding “fake news.” Addressing this issue, the European External Action Service was created by the year 2015. It was formed by a group of over thirty experts, including senior journalists, representatives from news organizations, academicians, and experts in facts verification. The group was in charge of assessing and regulating actions of the media and press. One of the first actions of this Task Force was to survey the public in general. During the months of November 2017 to February 2018, a public consultation was held for citizens included a phone survey that reached over 26,000 citizens. Up to 83% of the survey responders considered fake news a danger to democracy and 37% of them confirmed finding fake news on a daily basis. In the same survey, 45% of the responders believed that journalists were responsible for the transmission of the fake news, while 39% believed that such responsibility fell into the governments and 36% on the news corporations.13

The EU, with advice of the experts, defined four principles to guide the action against fake news: transparency (origin and sponsorship of the source), diversity of the sources, credibility, and inclusiveness (allowing all interested parties to participate). These principles marked the origin of the Code of Good Practice. Besides the adherence to the four principles previously described, the code calls for prosecuting fake accounts in social media and prioritizing true content news in search engines and other channels. In the search for success, it is essential to have the compromise of the big search engines and social media platforms, a compromised obtained shortly after.13

The work needs to continue in the eradication of the misinformation. One of the solutions was the creation of SOMA (Social Observatory for the Misinformation and Social Media Analysis). The objective of this institution is to support experts in their work against misinformation by providing them with a useful infrastructure and connecting them to a broad community of peers to collaborate on specific tasks. Other projects include the Rapid Alert System, with a purpose to monitor and detect misinformation affecting the institutions or its members. The goal of this project is, through the collaboration among member nations, to avoid false campaigns and the spread of hoaxes while sharing good practices with other international organizations.

Of interest is to analyze the types and effects of hoaxes. A group of researchers from the University of Navarra and the Barcelona Supercomputing Center have analyzed the typology of hoaxes disseminated in Spain, from March to April 2020. The results, published in the journal “El profesional de la Information,” indicated the finding of 292 hoaxes in the three Spanish platforms accredited by the International Fact-Checking Network: Maldita.es; Newtral, and EFE Verifica. Most of the false statements were spread mainly through text messaging (53.8%), the most basic and easy to manipulate format. Although less frequent, numerous hoaxes based on multimedia formats were also detected—photo (25.6%), video (14.6%), and audio (5.7%)—whose presence was somewhat more frequent on open networks such
as Twitter. This team of researchers concluded that the use of audiovisual in combination with other formats or content was preferred by the hoaxers. In fact, it was common to find real photographs and videos that are decontextualized by means of a text that falsely attributed them to particular events or place.¹⁴

Four categories of hoaxes were identified: jokes, exaggerations, wrong context, and deception. Deception, simply defined as false information, was unquestionably the most frequent modality of hoax (64.4%). Slightly, more than half (97 of the 188 hoaxes) found in the sample resorted to identity theft; that is, in order to give them greater credibility, they attributed their content to reputable sources, often trademarks. Beyond seeking the simple confusion of the citizenship, some of the deceptions had the purpose of economic fraud.

Wrong context (17.1% of hoaxes) was frequently linked to photographic or video formats: real images, often months or even years prior, that are falsely attributed to a noncorresponding context. For example, a photo shared on social media showing dozens of coffins line up in Italy attributed to deaths from the coronavirus pandemic, but in reality, the photo was related to an incident occurred in the year 2013, involving a major drowning of sub-Saharan immigrants who drowned while trying to reach the shores of Lampedusa.

Exaggeration (17.1%) was detected in several areas, especially in the political debate. Exaggeration is, for example, a hoax launched by Pablo Echenique Robba, the deputy spokesperson for “Unidas Podemos,” a leftist political party in the Spanish Parliament, accusing the right-handed party, Vox, of breaching the confinement orders and sending all its representatives (52) to the congress, while in reality only 16 of them had attended the sessions and were within the regulations and ordinances.

With just 1.4% of the total, the least frequent hoax modality in the sample studied was jokes. This type corresponds to “that type of hoax that consists in the dissemination of false information, with a burlesque, parodic, satirical, or cartoonish purpose.”

### Scientific sources to verify information

The coronavirus pandemic has shown the importance and value of scientific advisory for the media. Health and science advisors are increasingly needed to stand by political leaders. While realizing that we were not prepared for a health crisis like the one we are experiencing and after witnessing the improvisation, sometimes lack of organization and misled political decisions by governments and institutions, the importance of the presence of a scientific board in our institutions, including media corporations, becomes more evident than ever.

Many scientific institutions including universities, hospitals, laboratories, and pharmaceutical companies have redoubled their efforts to make available technologies and human resources to health authorities. But the scientific community is not exempt of the same communication problems and ethical dilemmas as the rest of the world. Sometimes moved by impulse, or the wish for results or even political
motives, information could be biased or even falsified. In the late May and early June 2020, shortly after the president Trump wrongfully attributed a value to hydroxychloroquine that was out of range, many voices were risen in the scientific community against this message and attempts to deviate or halt its use in the treatment of COVID-19. Again, some “unfiltered information” against the president Trump’s claims was made available and even published in well-respected medical journals. Right after, a major scandal was uncovered, shaking the foundations of the scientific system from the base to the top. The Lancet and the New England Journal of Medicine had both published articles deeming the inefficiency and risks associated to hydroxychloroquine in the treatment of COVID-19, to later discover the biased interest of some of the authors as well as the unsupported and non-contrasted results presented. Both journals have to retract their publications, an event seldom seen in the recent history of both publications.\textsuperscript{15}

However, the deed caused by these articles was not minor. Shortly after the publication and without time for response or contrasting analysis, the WHO suspended all trials that included the drug on any arm and soon the treatment disappeared from its use. It was later that different articles and the voice of scientists from Australia and some from the United States questioned the results published in these two journals causing the investigation and discovering that non-contrasted data and flaw results were included, modifying the results and the drawing of false conclusions. By that time, damage was already done, and hydroxychloroquine was no longer used or favored by the scientific community and the bad atmosphere around it made it tremendously difficult to conduct further unbiassed or blinded studies.

A similar but in the opposite side of the coin was the ivermectine, an antiparasitic drug that according to one investigation reduced the mortality rate of COVID-19 patients by up to 83\%. Although it was a “preprint”—a preliminary result without expert review—published in April on the SSRN platform. Its publication had a major impact in Latin America causing a widespread use of the medication in Peru, Bolivia, or Dominican Republic.\textsuperscript{16}

As we get closer to the development of a vaccine, these types of misleading events call for a very cautious scientific evaluation and advice prior to the publication of any news.

There are additional nonhealth-related consequences of the opinions generated by a health opinion body. Information about new treatment developments, failures, or successes as well as advisory related to the movement or activities of the population can impact the economy and even the political trend of a country. Considering that there is a proliferation of front pages and continuous media interviews, reports, and opinions of scientists, these have turned into major influencers, and their “genuine exposure” and lack of experience in communication make them sometimes an easy target for producers and scriptwriters.

The creators of false news often use the anonymous source methodology in which the issuer is not disclosed, and logically, the information is not supported by a legal source or individual. Hence, it is not unusual that when investigating the hoax, noticeable characteristics of those are the source being unknown to
the public, enhanced academic positions for the source or a loaded curriculum for
the speaker, or a given appearance as a solvent entity. In the mentioned study, only
4.1% of the hoaxes came from fictitious sources. An example is the video in You-
Tube titled “The Coronavirus can be stopped in 24 hours,” attributed to an alleged
graduate in molecular biology, Isidro Fuentes García, a person who does not really
exist.17

Maybe because information collected in social networks is more difficult to con-
trol than that appearing on traditional media, statistics and numbers are notably more
frequent, now, especially with the pandemic. Multiple notes appear regarding the
origin and lethality of the virus, its permanence in the environment, treatments, or
vaccines. Frequently, we see false recommendations or treatments for virus (gargles,
diets and wine, homeopathy, or the “miraculous mineral supplement”). To a lesser
extent, falsehoods related to health management in hospitals and facilities are also
found, as well as hoaxes spread by health assumptions or falsely attributed to public
health institutions, such as the WHO.

The digital and technological platforms and the power
of the networks

European and US platforms, as well as for most countries, depend in great part on
foreign countries for their actuation, cybersecurity, or storage. The technological
dependence opens risks in relation to property, privacy, and data protection as well
as in implementation of innovation projects. Policies aimed to protect and to make
these networks independent are being developed by both the EU and the United
States. As stated by Margrethe Vestager “there is a conviction that in the EU it is
necessary to ensure its digital technological sovereignty in key areas, so as not to
depend on other economic areas in something that is so essential and strategic. Even
before COVID-19, this was one of the priorities of the European Commission. The
epidemic has only accentuated it, and this will lead the EU to act on at least three
fronts.” Those three fronts can be summarized as data infrastructures, regulatory
changes that guarantee sovereignty, and rules to regulate competition (fair balance).
Some experts have seen the digital platforms as the great beneficiaries of the coro-
navirus pandemic. Indeed, during the states of exception and confinement around the
world, e-commerce using any of the digital support platforms has increased volume
by several folds. This has been the perfect environment for large technology com-
panies to imbed themselves along the households of many citizens. According to
Reuters, European Press Agency, these are large technology companies, mostly pri-
ivate, with global operations and little regulation. In many cases, their business is
based on accessing their user’s personal data. The lack of regulations on accessing
data gives them an incalculable comparative advantage compared to other types of
businesses, more traditional and not exclusively digital, which, however, are subject
to regulation.
The politicians’ influence

The Trump’s effect on Internet has been notorious. First, he was criticized as not following the traditional channels to communicate with the public and rather using Twitter to transmit critical information. Later, this practice has been adopted by many mandataries airing the question on why this is happening. Why are governments bypassing traditional media to inform public in general? Maybe the answer is the accessibility or maybe is just the need to bypass intermediaries. Some authorities have mentioned the advantage of the speed and free of opinion of the direct methods of information. However, the use of social media is not exempt of problems. Many messages can be rapidly labeled and targeted with counter campaigns. Messages and rumors mix with news and hoaxes and rapidly spread throughout the world. Venezuela’s president Nicolás Maduro has accused the United States to instigate rebellion and coups, Iranian chief of the revolution Ali Khamenei has called for the destruction of Israel among others.

President Trump voiced out his intentions to reform the Section 230 called Communications Decency Law, approved in 1996. It is also a fact that for years, politicians, journalists, and editors of all kinds of media have been demanding precisely this regulation to be reformed. An excerpt of the law: “No provider or user of an interactive computing service may be treated as an editor or issuer of any information from another information content provider.” Based on US jurisprudence, this means that social networks are not responsible for the content that is published on them, no matter how false, injurious, or criminal it may be. Even the democrat candidate for the 2020 presidential election, Joe Biden agree with the intention of the reform. In the words of president Trump, “when the big and powerful social network companies censor the opinions with which they do not they agree wield dangerous power… Online platforms are engaging in selective censorship that is harming our national discourse.”

It is to be seen however if this regulation of the digital platform comes to a benefit to the traditional media which might need to consider their methods in order not to be excluded from their ultimate goal of communicating news. Press and democracy have walked together for the past two centuries. It is likely that we will see a different world after COVID-19. As the frailness of the health system has been exposed by the pandemic, the weaknesses and failures of the media network have been seriously manifested, and there is uncertainty on the survival of some of them.

How to control the media and information

The control of the media has been sought by politicians, economists, businessmen, and even public personalities. Woodrow Wilson, US President during the World War I spread a strategy using the press to gain support among the citizenship has involved the United States into the big war. In a similar way, the role of the press and radio networks during World War II was essential in Churchill’s leadership. Later on, press and media, by then including TV, played a major role throughout the Cold War era.
The big media corporations are not just TV or press but they cross different scenarios, and some are involved in the financial and investment world. For example, Microsoft is a leader in informatics and digital media. The diversification of these groups makes them very difficult target with regard to controlling them, and although this might be a good point, with regard to press independence, it is a dangerous motive of concern. While media groups try to guarantee their information with the credibility and rigor of their professional journalists, there is fear of the possibility of using information and direct to consumer platforms as weapons. How can we control this threat? Natalia Sara explains that “this is the VUCA context (volatility, uncertainty, complexity, and ambiguity) … in the face of misinformation and falsehood, a company must act by communicating what the truth or the facts are and transmit them to all its stakeholders and, depending on the case, denounce the wrongful us if it.”

Negative news is shared much faster than positive ones. Anything that generates noise forces you to be more proactive, report it, and validate it. One of the things that have made this crisis unprecedented is that, for the first time in history, an “infodemic” has been declared. There have been days in which more than 600 hoaxes about COVID-19 have been published. The misinformation has been total. It has been predicted that by 2022, social networks and digital platforms will contain more false than real information. This leads us to the fact that companies must make greater communication efforts. At the same time, we should promote consumer responsibility.

Media can be controlled but information must not be. The utopian possibility of controlling information goes through the difficulty of enclosing ideas, opinions, and news in a box and that has been and is being tried by totalitarian governments, dictatorial systems, and even the capitalist system. This must not happen and we, the press, have the ultimate tool to prevent it: information.

References
1. Libertad Digital; 2020.
2. Digital News Report. Reuters Institute; 2020.
3. https://es.reuters.com/article/entertainmentNews/idESKBN23N1AJ.
4. Mulet JM. Que es la vida Saludable? Spain: Ediciones Destino; 2019.
5. https://www.elconfidencial.com/el-valor-de-la-informacion/2020-06-17/periodismo-muro-pago-democracia_2639428/.
6. Forte F. Coronavirus impact on digital advertising investment by sector Spain 2020. Statista; 2020. April.
7. https://www.unav.edu/web/facultad-de-comunicacion/detalle-noticia2/2020/05/21/un estudio-de-los-bulos-sobre-la-covid19-confirma-que-las-social-networks-are-your-main-environment-of-diffusion-above-the-journalistic-media/-/asset_publisher/ngL9/content/.
8. Coca-Cola pauses advertising on all social media platforms globally; 2020. https://www.cnbc.com/2020/06/26/coca-cola-pauses-advertising-on-all-social-media-platforms-globally.html?__source = sharebar|email&par = sharebar.
9. *How WhatsApp Destroyed A Village.* https://www.buzzfeednews.com/article/pranavdixit/whatsapp-destroyed-village-lynchings-rainpada-india.

10. Guterres A. Secretary General of the United Nations in a statement. Dated 21 May; 2020.

11. Aller MG. *Article in the digital El Confidencial.* 18 May; 2020.

12. https://www.prnewswire.co.uk/news-releases/fighting-fake-news-with-blockchain-new-eventum-platform-detects-bogus-content-in-minutes-684135691.html.

13. https://www.europarl.europa.eu/RegData/etudes/STUD/2019/608864/IPOL_STU(2019)608864_EN.pdf.

14. Salaverria R, Busion N, et al. Desinformación en tiempos de pandemia: tipología de los bulos sobre la COVID-19. *El profesional de la Información.* 2020;29(3):e290315. https://doi.org/10.3145/epi.2020.may.15.

15. Joseph A. Lancet, New England Journal retract Covid-19 studies, including one that raised safety concerns about malaria drugs. *STATS.* 2020. PARS International Corp.

16. Caly L, Druce J, et al. The FDA-approved drug ivermectin inhibits the replication of SARS-CoV-2 in vitro. *Antiviral Res.* 2020;178. https://doi.org/10.1016/j.antiviral.2020.104787, 104787.

17. Amautell A. *El bulo de que el dióxido de cloro cura el coronavirus.* Sociedad; 2020. https://www.65ymas.com/sociedad/bulo-dioxido-cloro-cura-coronavirus_14008_102.html.

18. Hendriks P. Expansion strategies of newspaper firms: diversification and innovation. In: *Newspapers: A Lost Cause?* Dordrecht: Springer; 1999. https://doi.org/10.1007/978-94-011-4587-9_5.

19. Sara N. *jscomunicaciondecrisis.com.* March; 2020.