UFMG morning bulletin: use of the media to disseminate good practices regarding COVID-19

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**Abstract**

The pandemic of the new coronavirus, Sars-CoV-2, which causes COVID-19, brought a moment never experienced before by the world's population. Millions of people were affected and, unfortunately, many deaths and related sequelae were reported. At the same time, modernity allowed the dissemination of news in excess due to new information and communication technologies. Sometimes misinformation took over the media. Political and economic interests unfortunately influenced the news. The UFMG Morning Bulletin, an extension action of the Universidade Federal de Minas Gerais, began to be published, seeking to defend the dissemination of correct epidemiological data, news, scientific evidence, and the truth. The positioning of health professionals and scientists is important to combat fake news and to bring knowledge to the community in general. The disclosure was daily and continuous until December 21, then it started to occur three times a week and from August 2022, once a week, expanding the topics to be addressed, with the main focus on infectious diseases, vaccination, and good information for the community in general.

**Keywords:** COVID-19; Pandemic; Infodemic; Disinformation; Communicable Diseases
Introduction

"The greatest misfortune of poor nations is that instead of producing wealth, they produce rich people" (Mia Couto)

On March 11, 2020, the World Health Organization declared a pandemic by the new coronavirus, Sars-CoV-2, which causes COVID-19. Since then, millions of people have been affected and, unfortunately, many deaths and related sequelae have been reported. Currently, interest in the reinfection and behavior of new Sars-CoV2 variants has been gaining prominence, making it essential to detect them early, assess their clinical manifestations, implement supportive and pharmacological treatments on time, and identify comorbidities.¹

A long way has been traveled and the struggle of the scientific community allied with various sectors of society was not limited to the search for answers and solutions to the challenges of the disease but also the systematic dissemination of quality science as a way to combat false news. The general population and health professionals began to seek reliable information at a time when little was known about the new disease. Then, a massive “infodemic” occurred, which made it difficult to understand the disease, allowed the dissemination of unjustified speculation, and sometimes resulted in misinformation with a negative impact on its control.²

The first case of coronavirus in Brazil and South America was registered on February 26, 2020, in the city of São Paulo. The number of cases has increased since then, and several measures have been taken, with an important and fundamental contribution from the Unified Health System (SUS) in Brazil.³

In Brazil, the situation was hard, especially due to the political use of the pandemic, procrastination and lack of decision-making⁴ and misinformation supported and practiced by the President of the Republic and medical associations, which should be responsible for recommending and guiding the adoption of good clinical practices, based on the best available evidence.⁴ The insistence on prescribing what became known as the “Covid Kit”, certainly contributed to Brazil having one of the worst results among countries in coping with the pandemic, becoming among the three countries with the highest absolute number of victims of COVID-19. Ensuring that health professionals adhere to evidence-based practice is equally important. Finally, educational interventions aimed at improving people’s ability to make informed health choices are essential in the country.⁵

Faced with the “infodemic”, professors and physicians linked to the Universidade Federal de Minas Gerais (UFMG) joined forces with medical students to prepare and disseminate a Morning Bulletin with quality scientific information. This article seeks to record the elaboration and contribution of this action and discuss the importance of the scientific community to mobilize for extension actions outside the university walls, contributing to the wide dissemination of reliable information, using social media and other means of information.
Emergence and evolution of the UFMG Morning Bulletin

The Morning Bulletin (Figure 1) emerged in May 2020 as an extension project of the UFMG Medical School, with the objectives of sharing relevant and reliable scientific evidence, systematizing epidemiological data, and highlighting the main news from Brazil and the world, informing and dialoguing with the population. The publication has been released digitally and uninterruptedly. UFMG, as a public university, strives to approach and establish a dialogue with the population, fulfilling its “mission of generating and disseminating scientific, technological and cultural knowledge, standing out as a reference institution in the formation of critical and ethical individuals, endowed with a solid scientific and humanistic base and committed to transforming interventions in society”

Figure 1 - Morning Bulletin cover image

The objective was to produce, initially, daily, a newsletter containing summaries of recent scientific articles, updated epidemiological data, and news from Brazil and the world and to disseminate it on social networks. The content is selected by professors and summarized by medical students participating in the project. The language is accessible and the texts are succinctly prepared so that reading is easy, and fast and provides relevant information for the lay public and health professionals, through social networks. A sentence of the day is published in every bulletin, as a way of leading the reader to reflect on the pandemic. At all times, the authors realized the importance of reflecting on why the "infodemic" could harm readers (Table 1) and how it became necessary to search for ways to ensure that scientific evidence and best practices are always valued.
**Table 1 - Sources of misinformation and harm caused to readers/viewers**

<table>
<thead>
<tr>
<th>Information sources</th>
<th>Losses</th>
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<tbody>
<tr>
<td>Applications, scientific institutions, websites, blogs, “influencers”</td>
<td>Difficulty in accessing reputable sources and reliable guidance by people in general, by those responsible for decision-making, and by health professionals when they need it.</td>
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<tr>
<td>Media in general</td>
<td>Anxiety, depression, overload, emotional exhaustion, and inability to meet important demands. People in general may have difficulty with decision-making processes, with immediate responses and inadequate time dedicated to carefully analyzing evidence. There is a lack of quality control of publications.</td>
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<td>Podcasts, articles, social networks</td>
<td>The excess of information and its rapid dissemination through the various media can lead people to have access to any position, especially on social media channels (accounts of individuals and institutions), without adequate investigation as to its veracity and reliability.</td>
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Source: The authors. Modified from the Pan American Health Organization. World Health Organization. Understand the infodemic and misinformation in the fight against COVID-19.8

At the end of 2020 and the beginning of 2021, with the approval of vaccines against COVID-19, topics such as the safety, importance, and effectiveness of vaccines were addressed as a way to combat a large number of fake news and misinformation that were circulating at that time. The discussion about going back to school was another controversial topic, approached coherently and based on scientific evidence.

The continuous and daily dissemination of the Morning Bulletin took place on social networks and in various Whatsapp© groups, involving people from all over Brazil and abroad. As of December 2021, newsletters will be published three times a week. In particular, the advancement of vaccination, despite the inequality of access between countries with different economic powers, allowed greater control of the pandemic, by reinforcing non-pharmaceutical prevention measures. Given this, there was gradually a significant reduction in the volume of news and scientific publications related to COVID-19, and news of interest to the community and public utility was no longer so frequent. Nevertheless, we still believe that the continuous analysis and dissemination of new information on the efficacy and effectiveness of vaccines for different profiles and age groups of the population is fundamental, as well as the systematic monitoring of epidemiological data at local, regional, and national levels, always reinforcing the dynamic the intensification or relaxation of individual and collective prevention measures.

In the surveillance, we remain attentive to emerging and re-emerging diseases of international concern and pandemic potential, such as, for the time being, “monkeypox” and, more recently, Henipavirus Langya (LayV). Table 2 shows the distribution of the number of publications of the Morning Bulletin, according to the year.

**Table 2 - Distribution of publications in the Morning Bulletin by year**

<table>
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<th>Year</th>
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<tbody>
<tr>
<td>2020</td>
<td>251</td>
</tr>
<tr>
<td>2021</td>
<td>326</td>
</tr>
<tr>
<td>2022</td>
<td>96</td>
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Figure 2 shows the graphic distribution according to the year and month.

The publications became weekly from the week of August 15, 2022, taking place every Friday, incorporating information on any new health problem, of community interest, to the usual content on the new coronavirus (Sars-CoV-2).

With the excess of information conveyed by the internet, it is increasingly difficult to select high-quality content. In this way, the UFMG Morning Bulletin project, by selecting reliable epidemiological data, news, and studies, has contributed to keeping society well-informed about the pandemic in its various phases and, consequently, to increasing adherence to protective measures and prevention. Adding up all social media, by June 2022 the Bulletin had more than 10,000 followers, evidencing the great interest in this type of action and society’s demand for reliable information. It was the subject of news articles on television, radio, and print media. It was honored at the Free State Health Conference in 2022, in recognition of the services provided to the community in the fight against COVID-19, alongside several other categories that acted on the front lines. We consider
that, even with the end of the state of emergency in Brazil, in April 2022, the project continues with great relevance, as a way to keep the population informed about the disease and, more recently, other health problems of interest to the population. In particular, it exerts a direct influence on reducing the impacts of misinformation that still circulates on social networks.

Discussion

During the pandemic, Fake News undermined the approach to the disease, the institution of non-pharmacological measures, and adherence to vaccination. The WHO has shown concern about the huge "infodemic," its definition being the excess of information, some accurate and some not, which makes it difficult to find reputable sources and reliable guidance when necessary. With new information technologies and the use of social media, news multiplies exponentially in a short time, with manipulation of information with dubious intent. The institution of non-pharmacological measures was fundamental for controlling the pandemic. The positioning of scientific societies was essential to support these measures and oppose the discourse of supporters of the use of the "Covid Kit" and contrary to vaccination.

Xi et al. (2022) studied via online consultation in six Asian and Western jurisdictions the effect of perceived information overload and misinformation on vaccine availability and acceptance within a transnational context. The results showed that the information received was positively associated with the availability and acceptance of the vaccine. In addition, trust in the government and civil society organizations tended to strengthen the positive effect of information, reducing the negative impact of misinformation, being important the trust in health professionals and the information transmitted by them. Li et al. (2022) also assessed how infodemics and misinformation affect vaccination hesitancy in 6034 residents in six societies in Asia, Europe, and North America in June 2021. They concluded that older participants with a high educational level were less susceptible to information overload about COVID-19 and the belief in misinformation about vaccines. Higher socioeconomic status appeared to cushion the negative impact of vaccine misinformation and increase adherence. Hernandez et al. (2021) analyzed 1 million tweets about COVID-19. The results showed highly polarized and active conversations with anti-vaccine concepts that were influenced primarily by political and non-medical Twitter® users. In contrast, less than 10% of tweets came from the medical community, demonstrating a lack of active connectivity from these healthcare professionals to deal with misinformation. The authors introduce the concept of “Healthcare Provider Social Media Hesitation” to refer to the public health threat of inaction by healthcare professionals in providing scientific and pro-vaccine information. The authors conclude by describing multilevel strategies to encourage healthcare professionals and the medical community to be coherent, preventing the spread of misinformation. Increased frequency and diversity of social media use by health professionals and providers, literacy digital, and media trust can mitigate vaccine hesitancy and promote support for COVID-19.
vaccination. A review article on the topic concluded that digital health literacy can help improve prevention and healthy lifestyle adherence, improving user empowerment and enabling users to make the most of available options, strengthening patient involvement in health decisions and empowering them, and ultimately improving health outcomes. Efforts should be greater when the target audience is a vulnerable population. In this context, it is clear that Universities play an important role in controlling the pandemic. As institutions with large concentrations of young people, they have the potential to effectively disseminate information on COVID-19 awareness. Furthermore, there is a great opportunity for the advancement of academic education through online resources, which can also have a positive effect on the general community indirectly. Neupane et al. (2020) evaluated the role of academic institutions in combating COVID-19. Five universities from 44 countries were selected, whose official web pages were visited, and the initiatives taken to educate and raise awareness of the academic population about COVID-19 were studied. The study concluded that university websites provide information in a clear and accessible format, promoting the best user experience possible and that they can play a greater role in eliciting public understanding of the issue. About 78% of all institutions disseminated information about the pandemic; however, academic institutions in developing countries were less active and only 36% of Universities in South America disseminated updated information. In Brazil, the Universidade Federal de Minas Gerais is one of the most important in the country, and the Morning Bulletin has gained great relevance in the information coming from the academic environment.

The Morning Bulletin offers the opportunity for university students to participate in the systematization and dissemination of reliable information about COVID-19. While young people are at least at risk of serious illness from COVID-19, they are a key group in the context of the pandemic and share a collective responsibility to help break the chain of transmission. They are also the most active online, interacting with an average of 5 digital platforms daily. To better understand how young people have engaged with technology during the pandemic, the World Health Organization conducted an international study covering approximately 23,500 respondents aged between 18 and 40. The study results provide important insights into how young people go for information about COVID-19, who they trust as a source of information, their awareness and actions around fake news, and what their concerns are. About 43.9% of respondents reported that they share “scientific” content on their social media. The work highlights how to recruit young adults to actively combat fake news as the biggest current challenge, and highlights the importance of them navigating their digital world safely and making choices for not only protecting their health, but also the health of their families and communities. Advances in technology and social media create opportunities to keep people safe, informed, and connected. However, the same tools also enable and amplify the current infodemic that continues to undermine the global response and compromise pandemic control measures. Ensuring that policies and recommendations are credible and relevant to young people in a climate of misinformation, skepticism, and fear is a current and important topic. Regarding vaccination in children and adolescents, the editorial team of the Bulletin joined forces with the Brazilian Society of Pediatrics, the Academia Mineira de Pediatria, and other sectors of civil society to take a position in favor of immunization. Thanks to the support movements carried out, the availability of vaccines for children is possible, defeating the initial opposing position of the Brazilian Minister of Health. One of the great arguments of the anti-vaccine group is that children and adolescents mostly present with mild or asymptomatic clinical forms of COVID-19, but severe cases can occur and the literature worrying records morbidity and mortality rates and the occurrence of Multisystem Inflammatory Syndrome. The hesitation regarding vaccination was not limited to the pediatric age group and the fight against misinformation should emphasize the beneficial aspects and the low rate of adverse events.

There are also reports of an increase in domestic violence and alcoholism during the pandemic. Thiel et al. (2022) conducted a literature review on changes in the prevalence and severity of domestic violence. A total of 22 articles were found, three of which compared data before and after the pandemic. The prevalence and severity of psychological/emotional and sexual disorders thought to be related to domestic violence have increased in the general population. They concluded that further studies are still needed to assess the correlation between economic and financial aspects. It is concluded that during periods of remote work and social isolation, it is necessary to reinforce measures to prevent and notify domestic violence and at the same time publicize in the media forms of action and prevention and support for victims. Sohi et al. (2021), in a systematic review study of alcohol consumption during the pandemic, concluded that the results varied according to the country and the public addressed in the research, with a record of increased prevalence in the USA and the United Kingdom. The closure of schools and, subsequently, school absenteeism was a hotly debated topic in the Bulletin. It is the role of society to combat and seek ways to protect our children and adolescents. Public policymakers must take responsibility for the best decisions regarding the closure and reopening of schools, making the necessary adjustments in the face
of the epidemiological situation. The main challenges are to ensure: (1) self-care, well-being, and safe school opening; (2) continuity of learning with quality education; (3) distributive and ethical leadership role; (4) mental and emotional health; (5) absence of equity gaps; (6) absence of digital gaps; (7) cyber security. The governmental capacities needed to successfully address health challenges are fundamental and depend on the nation’s democratic experience, being associated with mortality, and reduction of cardiovascular diseases, cancer, transport injuries, and tuberculosis. On the other hand, deaths from endemic infectious diseases depend on implementing targeted interventions, such as mosquito nets and antiretrovirals. COVID-19 reaffirmed the value of avoiding simple dichotomies when assessing the role of politics in the population’s health.17 The government must adhere to the recommendations coming from experienced health professionals and documents with scientific relevance. Some democracies have struggled through this pandemic, but some have not. Consequences result from this approach.

The Morning Bulletin always seeks to defend good practices and combat misinformation, helping to record data and monitor the local and national situation. COVID-19 is currently under control thanks to the advancement of vaccination; however, we have to remain vigilant with the emergence of new variants. New epidemiological challenges are to come and the editorial team decides to continue to monitor the media and be coherent with good practices based on scientific evidence about COVID-19 and other diseases of population interest. Effective, quality communication can help build public trust during a crisis and increase investment in community engagement strategies to respond to the specific needs of marginalized groups.18

Conclusion

The scientific community must unite in this time of emergence and re-emergence of infectious diseases and the practice of "infodemic" and misinformation. The Morning Bulletin has been an important tool for the selection, systematization, and dissemination of quality scientific information and news, reinforcing the importance of the university’s participation in the life of society as a whole. The editorial team is attentive to scientific publications, information in the media, and epidemiological data to exercise their role as scientists and health professionals at a public university. There is an urgent need to pursue research on digital health literacy and develop digital platforms to help address current and future health needs related not only to COVID-19.

References


Declaration of conflict of interest: The authors have no reason to declare conflicts of interest and declare to be responsible for the reflections and conclusions of the article, seeking to combat Fake News and contribute to the dissemination of relevant scientific articles with good evidence.

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Statement of responsibility: The authors work in teams, coordinated by professors Maria do Carmo Barros de Melo and Unai Tupinambás. The idea for the Bulletin came from an undergraduate student at the time, Bruno Campos Santos, who is a regular contributor. For the elaboration of the article, a compilation of what was published was carried out, a search for scientific articles and then the elaboration of parts by each one of those involved, including the student coordinator. At the end, everyone read it, suggested changes and approved the final version.