

Infodemic: excess quantity to the detriment of quality of information about COVID-19

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The phenomenon referred to as the “infodemic” has stood out in the context of the COVID-19 pandemic. The term refers to “a large increase in the volume of information associated with a specific topic, the growth of which can occur exponentially in a short period of time due to a specific incident, such as the current pandemic. In this situation, misinformation and rumors appear on the scene, along with the manipulation of information with doubtful intent. In the information age, this phenomenon is amplified through social networks, spreading farther and faster, like a virus”.^{1,2}

Excess and often conflicting information makes it hard to find information that is truly useful for providing people with guidance, and can hinder decision-making by health service managers and health workers, especially when there is not enough time to assess available evidence. Moreover, constant bombardment with information that reaches people through a variety of media (such as television, radio, computer, tablets, smartphones, printed or electronic newspapers, blogs, social media, chat applications) ends up overloading them.³ As a result people often become anxious, depressed or even exhausted and unable to cope with the demands that arise.¹

Disseminating clear, consistent and evidence-based information is fundamental for addressing the pandemic. However, in the case of social media, anyone can manifest their ideas or share news, often lacking a scientific basis or a reliable source, and with no control over their contents. Only recently have owners and those responsible for large social media platforms begun to prioritize official sources of information about the pandemic and to block inadequate contents.⁴

Indeed, dissemination of false information can result in disastrous consequences for individuals and communities. In the United Kingdom, unfounded theories were shared massively blaming 5G mobile telephone technology for spreading the novel coronavirus. As a consequence, people who believed in that fallacy set fire to almost 100 mobile telephone transmission towers and assaulted telephone company employees.^{5,6} In Iran, where fake news circulated stating that drinking alcohol would provide protection against COVID-19 or would kill the coronavirus, more than 700 people died after drinking alcohol of unknown origin contaminated with methanol.⁷

In Brazil, such extreme situations have not come to light. However, there is intense circulation of fake news. False information is spread above all through social media – WhatsApp, Facebook and Instagram –, such as stating the COVID-19 cases do not exist, with images of vacant hospital beds, and information about homemade methods for preventing coronavirus contagion, treatment without scientific proof of its efficacy, and conspiracy theories that put the pandemic down to a political strategy, taking stances against social distancing measures needed to control propagation of the disease.⁸

This situation is a source of concern, given that social media reach a large part of the population. Moreover, the internet is an importance source for seeking information about COVID-19 prevention measures on the national scenario. A study revealed that periods of increased interest in COVID-19 occurred after the media published the main epidemiological landmarks of the disease in Brazil.⁹ In addition, the results suggest possible information gaps about some of the main forms of prevention, thus contributing to the spread of false information.


Since the beginning of the pandemic, the Ministry of Health (MoH) has been working to address fake news and provide the population and the press with reliable information.¹⁰ The MoH website (<https://www.saude.gov.br/fakenews>) provides a list of fake news, what is really known about the subject in question, and recommendations for COVID-19 prevention. Examples are shown in Figure 1. The MoH has made available a WhatsApp number (61 - 99289 4640) to which messages received via social media containing doubtful information can be sent, the truthfulness of which is then checked by MoH technical areas before an official reply is given about them. The main way to minimize the infodemic is to guide people to check the source and the veracity of information before sharing it or using it as guidance. In other words, priority must be given to quality and not quantity of information.

In July 2020, recognizing the importance of responding to the infodemic, the World Health Organization (WHO) held the first scientific conference on the theme.¹¹ The event brought together 110 specialists who concluded that the misinformation epidemic requires a coordinated and multidisciplinary response. In the same way as health authorities turn to the science of epidemiology in order to make decisions in response to the pandemic, evidence-based tools and interventions are needed to take a stand against the infodemic, based on the science of infodemic management, referred to as “infodemiology”.¹² Within this context, four mainstays have been defined for infodemic management: (1) information monitoring (surveillance); (2) strengthening digital health and science literacy capacity; (3) encouraging information quality enhancement processes, such as fact checking and peer reviewing; and (4) accurate and timely translation of knowledge, minimizing factors that can cause distortion, such as political or business interests comerciais.^{13,14}

WHO also highlights the role of scientists and scientific journals, whose duty it is to publicize the results of research in a far-reaching and timely manner, as well as seeking to communicate research results in a way the population can understand.¹ Another factor in the context of the COVID-19 pandemic is that problems related to wasted research become aggravated, such as weak research questions, inadequate research designs, diverse forms of inefficiency within studies, and poorly reported results, which can contribute to the infodemic becoming worse.¹⁵ This situation stresses the relevance of the role played by journals in screening and enhancing the quality of scientific publications.

In keeping with good scientific publication practices and WHO recommendations, *Epidemiology and Health Services: journal of the Brazilian National Health System* (RESS) is not sparing efforts aimed at publishing quality contents related to COVID-19 surveillance, prevention and control in a timely and widely publicized manner. Standing out among the initiatives adopted is the launch of a call for articles on the theme, fast-tracking the processing of these articles and creating a specific page on the journal’s website (<https://bit.ly/30Gu7Dg>). In addition, these articles have been publicized via the SciELO in Perspective blog (<https://blog.scielo.org/>), through the publication of press releases.

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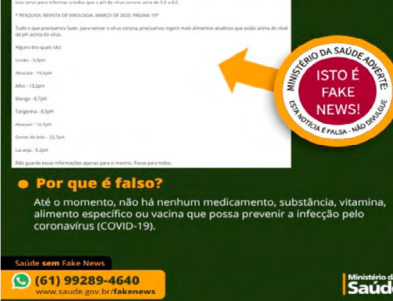

<p style="text-align: center;">CORONAVÍRUS</p>  <p>Por que é falso? Não existem estudos que correlacionam a vacina da gripe com o risco de adoecimento ou complicações pelo Covid-19.</p> <p>Saúde sem Fake News (61) 99289-4640 www.saude.gov.br/fakenews</p>	<p>Do not share these contents. They contain incorrect information.</p> <p>There are no studies relating influenza vaccination to risk of getting COVID-19 or causing COVID-19 complications. The article quoted was published in 2017(?), prior to the emergence of COVID-19, which was recorded for the first time in December 2019.</p> <p>In addition, the objective of the article was not to assess risk of coronavirus complications due to influenza vaccination and nor is this the conclusion of its authors.^a</p>																								
<p style="text-align: center;">CORONAVÍRUS</p>  <table border="1" data-bbox="327 734 478 925"> <thead> <tr> <th>DOENÇA</th> <th>ÓBITOS</th> </tr> </thead> <tbody> <tr> <td>COVID-19</td> <td>594</td> </tr> <tr> <td>Do. Cardíacas</td> <td>41.426</td> </tr> <tr> <td>Do. Cerebro Vasculares</td> <td>29.538</td> </tr> <tr> <td>IVAS (gripes)</td> <td>20.712</td> </tr> <tr> <td>Alzheimer e suas compes</td> <td>18.127</td> </tr> <tr> <td>D. Banco/Carde Pulmonares</td> <td>15.024</td> </tr> <tr> <td>Varicela</td> <td>14.480</td> </tr> <tr> <td>Diabetes</td> <td>13.360</td> </tr> <tr> <td>Trânsito</td> <td>10.598</td> </tr> <tr> <td>Do. Renais</td> <td>8.280</td> </tr> <tr> <td>Câncer</td> <td>7.964</td> </tr> </tbody> </table> <p>Por que é falso? O Ministério da Saúde informa: os dados de mortalidade no SUS são publicados a cada dois anos. Isso significa que as informações mais recentes que estão disponíveis são de 2018. Nenhum dado referente a 2019 ou 2020 foi divulgado até o momento.</p> <p>Saúde sem Fake News (61) 99289-4640 www.saude.gov.br/fakenews</p>	DOENÇA	ÓBITOS	COVID-19	594	Do. Cardíacas	41.426	Do. Cerebro Vasculares	29.538	IVAS (gripes)	20.712	Alzheimer e suas compes	18.127	D. Banco/Carde Pulmonares	15.024	Varicela	14.480	Diabetes	13.360	Trânsito	10.598	Do. Renais	8.280	Câncer	7.964	<p>Do not share these contents. They're fake!</p> <p>The Ministry of Health hereby informs that SUS mortality data are published once every two years. This means that the most recent available information was published in 2018.</p> <p>No data relating to 2019 or 2020 have been released so far.</p> <p>Any information publicized containing these figures has not been validated by the Ministry of Health.^a</p>
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Figure 1 – Examples of Ministry of Health replies to fake news about COVID-19

Source: <https://www.saude.gov.br/fakenews>

a) To find out more about coronavirus (COVID-19), access the official Ministry of Health portal: <http://saude.gov.br/saude-de-a-z/coronavirus>.

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