

Social media: A tool that can benefit public health?

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Abstract

The global use of social media has changed access to health information, and the internet has become its primary source for the general public. However, judging health information on social networks remains difficult for non-medical readers since most available information is unregulated and of questionable quality, possibly leading to poor health behaviours and decisions. COVID-19 is the greatest public health emergency of this generation that led to a widespread increase of misinformation. Health communicators can play a role in fighting this infodemic by writing about complex issues in accessible language and providing reliable sources. Filtering and translating the information published online is an essential process that will positively influence public health.

The internet has drastically changed the way people access information about almost anything. Health is no exception to this trend and the internet has become the main source of information for many patients wanting to know more about specific health issues.¹

The internet gave rise to social media, enabling individuals or communities to share information and ideas in real-time using internet-based tools: e.g., Facebook, Twitter, Instagram, and blogs. Social media quickly spread from a purely social function for young people to having a wider use across all ages and professions, enhancing education or professional networking and community interaction.²

In recent years, the importance social media has had in influencing societal trends has been amazing. Although influencer marketing is an established marketing strategy, social media has



made it extremely powerful. Influential people become well-known online, they build a reputation within their area of expertise and gather a large number of followers, who pay close attention to their views and are guided by their choices and lifestyle.

Social media and the COVID-19 infodemic

Social media also became an essential part of public health communication and influence, enabling patients to become more active consumers of health information. However, unlike sponsored medical communication and health journalism, blog posts and personal commentary channels have been completely unregulated. With increased social media and internet participation, it has become obvious that there is a need for quality assurance of such information and its sources.¹ This need was brought into sharp focus this year as the world

went through the enormous COVID-19 challenge that created both a huge demand for information as well as a breeding ground for fake news and ludicrous myths. This health crisis was

associated with a new concept: an infodemic, which refers to the large volume of misinformation generated about the disease, its spread, and its treatments. The WHO defined an infodemic as an excessive amount of misinformation that creates confusion and distrust among people, hampering an effective public health response.³

One of the challenges was dealing with the increasing amount of false health content circulating on social media platforms.⁴ Most social media companies (e.g., Facebook and

Twitter) worked alongside the WHO to filter out unfounded medical advice to counter the spread of non-founded ideas that could risk public health.³ Examples of this are taking drugs

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without a prescription or a bath in bovine faecal matter, drinking toxic detergents, or otherwise partaking in risky behaviours that could have a social negative impact, such as panic shopping or spreading “conspiracy theories”.⁵ Nevertheless, social media was responsible for much unfiltered information online, due to its accessibility and the infinite possibility to spread data throughout the general public.

With the obvious growth of social networking and the public’s hunger for accurate COVID-19 related information, science organisations, policy-makers, healthcare professionals, and organisations also began to communicate via social media. This was helpful in mitigating the infodemic phenomenon and was effective in raising awareness about misinformation and how it can be minimised.

Ways to improve health communication on social media

Judging health information on social networks remains difficult for nonmedical readers as much of this freely available information is unregulated and of questionable quality. Accurate methodology and reporting is important as it adds to the belief construct and reassures the scientific community that the data the authors set out to obtain is correct and accurate. For example, scientific communication is usually regulated by the peer-review and publishing process, which ensures that each published study is appropriately designed, performed, and reported.⁶ However, for the general public, this peer-review process is non-existent. Sometimes a press release, blog, or a simple statement citing data can be confusing and raise unfulfillable expectations. To avoid this, health writers should highlight whether or not a given study was peer-reviewed and explain that this means the validity and quality of reporting has been checked by other experts in the field. Also, it is important to place the study data in the long evidence-building process, e.g., “this is the first study in humans and the results will now need to be confirmed in larger, controlled studies”, so the public knows what to expect and how to act accordingly.

When writing for patients and lay audiences, word choice is imperative. Each word must accurately reflect the data in a language the reader understands. One single word can alter the meaning of a simple sentence, for example: “This study *shows* treatment X is effective” vs. “This study *suggests* treatment X is effective”. The

general public may perceive the word “shows” as the same as “suggests”, thus raising false certainties about a subject that can be wrongly relayed across social media platforms. Another example is the word “significantly” that is often used when reporting quantitative data but has a specific meaning in science. Undoubtedly, the word “significantly” should only be used if there is a p-value associated with the datapoint. However, if a study result has a non-significant result, it does not mean there is no clinical difference. Other factors such as the sample size must be taken into account for the practical significance to be determined, so it is also important that the medical writer places the study results in context when communicating to the lay audience.

Furthermore, the language and vocabulary used should be appropriate for the lay audience, and it has to be engaging and appealing on social media. Using short sentences with a straightforward message in a relaxed tone with everyday language is preferable, and bullet points make complicated concepts easier for the reader to capture, understand, and remember.

Lastly, reconceptualising the data by using imagery, visualisation, or numeracy are useful ways of explaining health data. For example, in the context of the COVID-19 pandemic, several health organisations like WHO adopted this strategy and used engaging imagery on social media to make the public aware of important health issues to be taken into account during the pandemic (Figure 1).



Figure 1. WHO’s infographics available on Facebook, designed to educate about ways to reduce the risk of becoming infected with COVID-19

(<https://www.facebook.com/WHO/photos/a.167668209945237/3538127066232651>)

Thus, filtering information published online and, sometimes, translating it so that it targets a specific audience is a necessary process that can have positive implications on public health. It is clear that governments and institutions must create guidelines and mechanisms to control the information flow on the internet.⁷ Health writers should also be encouraged to critically analyse information before communicating it on social media and be a part of the filtering and “translating” process, as this is their field of expertise.

The COVID-19 infodemic brought to light the urgent need to teach the public about the clinical trial process and the role that scientists, regulators, and manufacturers have in creating and developing a drug and, to what lengths they go to ensure that medicines are safe and effective. This information, brought by the science communicators, must be reliable and accessible, as the general public should be able to understand the basics of science in order to make correct and informed decisions. Since patients increasingly use social media to educate themselves about their health problems, used responsibly, it could be a useful tool to educate patients and promote public health messages.^{8,9}

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Conflicts of interest

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Author information

Sara Ferrão, MSc, is a pharmacist and a freelance medical writer with more than 7 years experience. She’s passionate about communicating health and medicine and has been focusing her work on developing accessible and engaging content for the lay audience. She also provides writing and translating services for pharmaceutical companies.



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