



Facebook, Instagram, Reddit and TikTok: a proposal for health authorities to integrate popular social media platforms in contingency planning amid a global pandemic outbreak

Marzieh Eghtesadi^{1,2} · Adrian Florea^{3,4}

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Abstract

In December 2019, a new severe respiratory coronavirus infection (COVID-19) was detected and has since spread across the globe to be ultimately declared a pandemic by the World Health Organization on March 11, 2020. For physicians and allied medical professionals, the period since has been marked by an increased and rapidly changing flow of information from multiple regional, national and international health authorities, regulating bodies and professional associations. Although social media platforms have an active presence in the instant dissemination of information and medical professionals display active participation in them, traditional channels such as email are still being emphasized as a means of communication. This article discusses the opportunities offered by social media platforms such as Facebook, Reddit and TikTok to disseminate medical information both for the use of physicians and as a means to communicate essential information to the public at large.

Résumé

En décembre 2019, une nouvelle infection respiratoire au coronavirus (COVID-19) a été détecté et s'est propagé, depuis ce temps, à travers le globe, jusqu'à être ultimement déclarée une pandémie par l'Organisation Mondiale de la Santé en date du 11 mars 2020. Pour les médecins et les professionnels de la santé alliés, cette période a été marquée par un flux d'information sans cesse croissante et rapidement évolutive provenant de la part des autorités de santé régionaux, nationaux et internationaux, des organismes régulateurs et des associations professionnelles. Bien que les plateformes des médias sociaux permettent un moyen de dissémination instantanée de l'information et que les professionnels médicaux y participent activement, les outils traditionnels, tel que le courriel, demeurent des moyens de communication importants. Cet article explore les opportunités offertes par les différents réseaux sociaux, tels que Facebook, Reddit et TikTok, pour disséminer l'information médicale auprès des médecins ainsi que comme moyen de communiquer de l'information essentielle auprès du public en général.

Keywords Online medical community · Physician networking · Reddit · TikTok · Facebook · Social media · Healthcare communication · Influencers

✉ Marzieh Eghtesadi
marzieh.eghtesadi@mail.mcgill.ca

¹ Centre de Recherche, Centre Hospitalier de l'Université de Montréal (CHUM), 1000 St Denis, Montréal H2X 0C1, Québec, Canada

² Department of Clinical Neurosciences, Chronic Pain Centre of CHUM, Montréal, Québec H2X 0C1, Canada

³ Department of Emergency Medicine, McGill University, Montréal, Canada

⁴ Health Informatics at Johns Hopkins University, Baltimore, MD, USA

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The massive mobilization measures to contain the global outbreak of COVID-19 have also triggered a wave of information that has been overwhelming within the medical community. As physicians practicing in both an academic tertiary care centre and a community-based hospital, our email inboxes have been flooded with rapidly evolving emergency measure guidelines from various authorities, including our institutions, our provincial and federal medical associations, public health, and scientific organizing committees. New platforms have been created by departments of information technology (IT) as a means of facilitating discussions between physicians. Unfortunately, the lack of filtering of communication by topic or interest and the recurrent use of email chains to large groups in asynchronous fashion lead many physicians requesting to be removed from such platforms. This excess of information has even prompted authorities to reassure physicians, via email for example, that the messages sent out from IT are not spam or originating from hacked accounts. These difficulties with efficient ways of communicating have led us to question why we, as physicians, do not make better use of current social media platforms in times of crisis, when communication is key to disseminating effective strategies to control disease outbreak. This short paper is a summary of these reflections by discussing potential benefits and limitations of some of the most popular social media platforms; it is an attempt to encourage the medical community to integrate, albeit cautiously, these platforms as a means to communicate scientifically sound medical knowledge both between healthcare workers and to the public.

Facebook is the biggest social network worldwide with 2.5 billion monthly active users (Clement 2019). In regard to disseminating or obtaining research evidence, a Web-based survey found that, although more than 95% of health researchers and clinicians believe in the role of social media for this purpose, only 15% of them made use of it (Tunnecliff et al. 2015). However, the creation of virtual communities by healthcare professionals on social media is increasing in popularity. For instance, in the Canadian province of Québec, over 5000 physicians are members of physician-only Facebook groups, including private groups such as “Médecins québécois pour des solutions efficaces en santé” and “Canadian Women in Medicine”, which are solely managed by a few physician moderators on a voluntary basis. Although a majority of physicians rely on email correspondence for important and urgent matters, regulatory colleges can collaborate with such physician discussion groups, in order to include them in their means of communicating with members who are more active in online virtual communities. It may also be easier for these members if institutional authorities created new discussion groups within social media already familiar to them, instead of using entirely new

platforms requiring new profile registration and the added burden of having to learn how to navigate them. However, such use of social media would only be beneficial if the aim were to give physicians a way to encourage general discussions as a group, and would not be possible if exchange of sensitive or confidential information were involved.

Moreover, just like many physicians use various email addresses to distinguish their personal versus professional activities, they could create a distinct professional Facebook profile if necessary. The added advantage of such a Facebook profile would be that physicians could subscribe (i.e., “like or join”) to medical forums (i.e., “pages”) with scientific content solely related to the pandemic, such as the pages of the World Health Organization and the Centers for Disease Prevention and Control, where they would all see reliable, objective and consistent information directly on their individual page (i.e., “newsfeed”). They could also make use of the integrated private chat function (i.e., Facebook Messenger) when exchanging with specific colleagues and avoid the frustrations related to the “reply to all” function in emailing.

Another interesting use of social media platforms in disseminating information to the general public in times of outbreaks would be the potential to collaborate with physicians who manage Facebook pages or Instagram accounts, and who act as “influencers”, meaning “someone (or something) with the power to affect the buying habits or quantifiable actions of others by uploading some form of original content to social media platforms” (Martineau 2020). We believe that these physician-managed “pages” are trustworthy sources of information for the public as physicians remain accountable for the online content they share with the public, as highlighted by numerous guidelines from medical protective associations on how to mitigate risk (CMPA 2014). These pages and accounts have a large number of subscribers (i.e., followers) who consult the content and images posted by the page administrator. Interestingly, many of the social media platforms also offer the possibility for administrators to pay in order to increase the visibility of their content (i.e., boost a post).

However, before urging health authorities to financially support such information dissemination initiatives, we must ensure that the visibility reported by Facebook and other social media platforms translates into actual changes in population behaviours and disease outcome. One potential way to measure such impact would be to correlate the parameters selected in “boosting a post”, such as target age group and geographical location, to ArcGIS, the world’s leading mapping and location analytics platform by Esri. By combining these two platforms, we could see, for instance, if boosting a Facebook post containing information on the importance of social distancing on a page highly visited by young professionals leads to a reduction in the rate of disease spread in a high agglomerate region with popular afterwork social gatherings.

Moving on to another social media platform, Reddit is a website hosting a colossal collection of discussion forums organized by subjects into groups (i.e., subreddits); Reddit is the 6th most frequently visited website in the United States (Authors 2020). As of March 15, 2020, the total number of users taking part in a subreddit community with the word “coronavirus” or “covid” was over 1.6 million. Reddit’s homepage displays an initial filter which allows users to browse topics according to what is hot, new, top, controversial or rising. Once users enter a community, the posts that are displayed first are those that members of that subreddit community have voted up, which is entirely based on subjective user preferences. The only content that is filtered out is hate or discriminatory comments, otherwise thousands of users could have heated debates about health topics, or any other topics, and gain significant popularity despite the complete lack of scientific validity. Posts generally contain no references and communities are managed by anonymous moderators. Despite this lack of content validity traceability, we believe there is useful and scientifically sound content on this platform, with likely many users with medical professional backgrounds, despite the lack of oversight from recognized health authorities.

Finally, the application TikTok, which was released on the global market in 2017, consists of short-form mobile videos with users performing lip-synching or other creative videos accompanied by music. It currently has over 1 billion users and is available in 150 different countries (Doyle 2020). One of the most popular videos that arose amid the COVID-19 outbreak contributed to the rising fame of the following song from Vietnam promoting preventive measures: “Do not touch your face. Wash your hands. When you greet your friend, do the namaste”. For physicians working in community youth clinics, knowing how to discuss information contained on such a popular social media platform can serve as a powerful tool when promoting adherence to medical advice.

It has been stated that an effective response to COVID-19 from the healthcare workforce must include “supportive conversations, clear guidance when recommendations exist, attempts to minimize misinformation, and efforts to reduce anxiety” (Adams and Walls 2020). One of the problems with popular social media platforms, such as Facebook, Reddit and TikTok, is that they lack scientific oversight, generating noise and false information. In times of health crisis such as that we are currently experiencing, resources must be redirected to essential services to COVID-19 response and the healthcare workforce cannot filter the spread of misinformation online. Another limitation with social media is that its use is not generalizable to the whole population. This is particularly important when considering that older adults, who are also most vulnerable to the complications of COVID-19, do not use these social networks and rely on traditional means of communication. However, taking into consideration the population who does actively spend time on social media, we describe specific

visibility features on these platforms that can be used to promote health measures, such as social distancing. We encourage public health authorities and the support of politicians to act proactively in reaching these members of society who favour the use of online platforms to seek information. Finally, as physicians, some of us are already actively participating in social media communities, from members on discussion groups to popular figures giving advice to virtual followers. We would therefore also encourage our regulatory associations to guide our impact within these online social media platforms, as determined by public health and political authorities. These opportunities could be provided by means of Continuing Medical Education that goes beyond risk mitigation, helping us better understand the frameworks of information management.

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Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

References

- Adams, J. G., & Walls, R. M. (2020). Supporting the health care workforce during the COVID-19 global epidemic. *JAMA*, *323*(15), 1439–1440. <https://doi.org/10.1001/jama.2020.3972>
- Authors *Top sites in United States*. <https://www.alexa.com/topsites/countries/US>. (consulted March 15 2020).
- CMPA (2014). *Top 10 tips for using social media in professional practice*. <https://www.cmpa-acpm.ca/en/advice-publications/browse-articles/2014/top-10-tips-for-using-social-media-in-professional-practice>. Accessed 15 Mar 2020.
- Clement J. *Number of monthly active Facebook users worldwide as of 4th quarter 2019*. <https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/>. (consulted March 15 2020).
- Doyle B. *TikTok statistics – updated March 2020*. <https://www.wallaroomediacom/blog/social-media/tiktok-statistics/>. (consulted March 15 2020).
- Martineau P. *The WIRED guide to influencers everything you need to know about engagement, power likes, sponcon, and trust*. <https://www.wired.com/story/what-is-an-influencer/>. (consulted March 15 2020).
- Tunnecliff, J., Ilic, D., Morgan, P., Keating, J., Gaida, J. E., Clearihan, L., et al. (2015). The acceptability among health researchers and clinicians of social media to translate research evidence to clinical practice: mixed-methods survey and interview study. *Journal of Medical Internet Research*, *17*(5), e119-e.

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