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Commentary: "The vaccine Selfie" and its influence on COVID-19 vaccine acceptance

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In December 2020, the United States Food and Drug Administration (FDA) issued emergency use authorizations for the Pfizer and Moderna COVID-19 vaccines [1]. Healthcare workers, who were among the first to be vaccinated, took to social media to share their rationale for getting the vaccine. The "vaccine selfie" was born. Despite now universal vaccine eligibility in the United States for everyone over age five, vaccination numbers have lulled. As healthcare workers, we have a platform—and therefore a duty—to help encourage the general public to get vaccinated, especially as vaccine hesitancy threatens uptake of the vaccine and subsequent boosters [2]. Understanding how to use social media to effectively influence vaccine uptake is a useful and timely tool in the current, and potentially future, pandemics.

As has been shown in many public health crises before, social media is a double-edged sword for the field of infectious diseases [3]. There is potential to positively influence vaccine behavior and rapidly knowledge-share, however it is also a space where falsehoods have been spread [4]. For example, during the Ebola crisis, fear was spread via social media causing widespread, unnecessary panic [5]. During this current pandemic, disinformation campaigns surrounding the COVID-19 vaccine have been disseminated throughout online platforms [6,7]. This has been associated with decreased vaccine acceptance, [7] magnified the voices of anti-vaxxers, and further promoted vaccine hesitancy [6].

The concept of *social capital* is central to this mission of utilizing social media to increase vaccine acceptance. Harnessing healthcare workers' *social capital* on social media platforms could provide followers with a sense of comfort that a voice they *know* and *trust* [6] received the vaccine. This is contrary to sharing explicit information and statistics without any personal sentiment behind a social media post. The sense of comfort viewers get is based on true or perceived interactions with individuals posting. This relationship reassures them to proceed with vaccination because someone they

know and trust also did. To that end, posting a photo of yourself getting vaccinated is more influential than only sharing data as the *social capital* that is shared has great power to positively influence other users.

We confirmed these sentiments with a survey of frontline healthcare workers at Michigan Medicine during the initial vaccination roll out. We surveyed a multitude of different healthcare professionals including attending physicians, residents, medical students, and nurses. In this study, we found that just less than half of healthcare workers surveyed posted on social media after receiving a COVID-19 vaccine (Fig. 1), and that more than threequarters of those who posted received questions from friends and family after doing so. In addition, the majority of healthcare workers believed that social media posts positively influenced their family and friends' perception of the vaccine. Moreover, we found that almost all of those who posted on social media said they wanted others to feel more comfortable getting the vaccine, yet, pertinently, only one-third shared explicit information about the vaccine itself. Users share with the intent of providing followers with a sense of comfort that someone they know and trust received the vaccine, rather than disseminating explicit information. Our study demonstrates the positive influence that social media can have in promoting COVID-19 vaccine uptake.

This is an area where it is critical that we intervene to harness online platforms to combat misinformation. Healthcare workers are an important group to lead messaging, as studies have shown that patients commonly rely on medical professionals as primary information sources to guide decision-making on vaccination [8,9]. Moreover, many people on the fence about getting a COVID-19 vaccine hinge their decision on discussions with their primary care physician (PCP), [9] particularly as there have been increasing efforts to expand PCP administration of the vaccine [10]. Therefore, effective utilization of social media on the part of healthcare workers may be a helpful adjunct in countering negative messaging and working towards vaccine acceptance [6,7]. In light of the current pandemic, social networks have gravitated towards the virtual sphere due to social distancing concerns, making social media even more pertinent.



Commentary





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Fig. 1. Percentage of Surveyed Vaccinated Healthcare Workers who Posted to Social Media Following Initial Vaccination (n = 65).

There are, of course, potential downsides and risks to this form of social media usage. For one, posting of older pictures of initial doses could be seen as outdated. The solution to this is to make a renewed push to post after receiving one's current booster dose. In addition, initially in the pandemic there was concern that posting could provoke resentment in those unable to access the vaccine given limited supply. However, now, in 2022, the abundance of vaccine doses in the United States makes this much less of a concern domestically. In addition, there is some risk that widespread social media posting on the part of healthcare workers may discourage those against the vaccine from seeking employment in places like hospitals that require it, possibly backfiring. However, the potential for good far outweighs this potential harm. Lastly, we run the risk that we may miss those people who do not use social media. This means that social media cannot be the only way we reach those who have not yet been vaccinated, but rather one part of the toolbox.

We need to incentivize healthcare workers to harness their social media platforms to combat the spread of misinformation about the COVID-19 vaccines and promote massive vaccine acceptance. To do this, we need to get creative. This could mean photobooths in hospital entryways and vaccination sites, encouraging Twitter to verify more healthcare workers in order to add further validity to their platforms, and requesting "vaccine selfies" be submitted at medical conferences. We challenge the broader *Vaccine* community to continue to amplify your social media voices to help promote COVID-19 vaccine uptake.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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