

INTRODUCTION

Vaccines are one of the most effective medical interventions in history, eradicating diseases that were common in the past, such as smallpox, and almost completely wiping out polio (Hinman, 1999). One would think that history has taught us an important lesson that vaccinations are efficient in preventing deaths and hospitalizations, although a group of people who are against inoculating themselves or their children due to a variety of underlying reasons has existed ever since the introduction of the first smallpox vaccine in the 19th century (Wolfe and Sharp, 2002).

The motivations behind vaccine denial might encompass beliefs in science conspiracies, nonconformist needs for personal freedom, fears of medical intervention, religious or moral beliefs, and many others (Wynne, 2006). However, it is important to recognise that unwillingness to vaccinate is becoming a concern of public safety, considering that it has led to outbreaks of diseases in the recent past and higher numbers of deaths and hospitalizations from certain infections, including the measles epidemic affecting over 1000 people in the UK in 2013, re-emergence of measles cases in the US in 2014 (Horne, et al., 2015), and even more recently, higher hospitalization rates among unvaccinated individuals during the COVID-19 pandemic in 2020 (Scobie, et al., 2021).

Thus, engaging with anti-vax communities is crucial in protecting public health by avoiding re-emergences of diseases in the future, but it is easier said than done. Public health institutions often attempt to engage with vaccine deniers by employing strategies that entail the dissemination of information on the efficiency and safety of vaccines, and corrective language. To illustrate, a recent guidance document published by the World Health Organization in 2017 outlines the methods of responding to anti-vax advocates in public discussions, and the sample responses for spokespeople include correcting the messages that stem from disinformation, debunking anti-vax arguments, and providing statistical information. Whilst dissemination of credible information on vaccines to the public is important, it is questionable whether the deficit model and corrective language are adequate strategies in engagement activities, considering that it was shown to have a negligible impact and might even be counter-productive because vaccine denial is still fairly prominent – for example, based on statistical data from 2020, the intention to get the COVID-19 vaccine during the pandemic was ranging from 41% to 89%, depending on the country, despite the widespread information on vaccines across the media (Feleszko, et al., 2020). This raises the question of whether it is at all possible to engage with anti-vax communities that are seemingly immune to trusting evidence-based information.

First, it is important to highlight that the notion of engagement does not necessarily refer to persuasion or changing one's views, but rather encouraging a civilized dialogue with anti-vax communities that might consequently lead them to reflect on their own views and possibly foster more positive attitudes toward vaccines. Engaging with communities that seem to be unwilling to critically evaluate their own views might seem like a utopian idea, although this essay suggests that choosing adequate communication strategies might lead anti-vaxers to become vaccine hesitators and eventually accept vaccination with time, and a potential framework that could be employed to build, or rather fix the trust in medical interventions such as vaccines, will be outlined.

MOTIVATIONS BEHIND VACCINE DENIAL AND THE ROLE OF SOCIAL MEDIA

Vaccine deniers' attitudes are multicausal and do not necessarily stem from a lack of epistemic background, which suggests that despite being important, disseminating information in the media might not be effective in engaging with these publics. In fact, according to a study by Swingle (2018), there is no correlation between attitudes to vaccines and educational level or socioeconomic status. Furthermore, as suggested by Goldenberg (2021, p.129), anti-vax views are often rooted in mistrust in scientific institutions, and are related to medical racism, commercialization of science, or exposure to disinformation on social media. The latter reason could be considered one of the most influential factors behind vaccine denial since there are more than 4.3 billion users of social media online and the liberalized platforms provide an opportunity to connect with like-minded people, and not only share credible information on vaccines, but also the spread disinformation, which might foster anti-vax views (Dixon, 2022). This essay will delineate the role of social media in anti-vax advocates' communication and whether it could be employed as a vessel to engage with these publics.

Anti-vax communities often turn to social media where they feel heard and seek validation for their health-related choices instead of seeking information from medical providers. In fact, according to a qualitative study by DiRusso and Stansberry (2022) which employed the circuit of culture method by extracting information from Twitter, Facebook, and Instagram posts as well as anti-vaccination websites, it was discovered that anti-vax social media posts gain more engagement compared to pro-vaccination posts and testimonies. In order to understand the core reasons behind high engagement in anti-vax posts on social media, another study by Duchsherer, et al. (2020) analysed the content posted by vaccine-hesitant parents on a website called VaxXed, which contains hundreds of videos compiled from the YouTube platform where parents share beliefs that their children were injured by vaccinations. The videos were randomly selected and transcribed into text, and the most prominent themes were identified – including the “distrust of doctors” and “community building” (Duchsherer, 2020). This leads to believe that engagement with anti-vax content on social media is disproportionately higher than pro-vaccine engagement because it appeals to emotions and creates more room for sharing experience-based content. Altogether, these examples suggest that anti-vaxxers often turn to online communities to validate their choices regarding vaccination instead of relying on resources from scientific institutions and being bombarded with vaccine efficiency and safety statistics.

However, it is important to recognize the dangers of high engagement in anti-vaccination posts on social media, because spreading disinformation on vaccines could lead to more people questioning the efficiency and safety of vaccines and, as mentioned earlier, it could consequently lead to the re-emergence of eradicated diseases and higher hospitalization rates in the future. Combatting vaccine-related disinformation on social media should be prioritized, and, as suggested by Maharaj, et al. (2021), could be achieved by artificial intelligence screening, although engaging with anti-vax communities that tend to get involved in networks that encourage the spread of pseudoscientific data and conspiracy theories is just as important.

ONLINE COMMUNICATION: SHIFTING TO EVIDENCE-BASED DISCUSSIONS

This essay suggests that in order to engage with anti-vaxxers, social media could be employed as a vessel to deliberate with these publics on a more personal level via experience-based storytelling before presenting evidence-based information on vaccines from authoritative sources.

In order to achieve this, it might be useful to encourage creating social media discussion groups dedicated to reflexive two-way discussions where citizens could share their personal vaccination stories and relatable content which, as a consequence, could create a medium where anti-vaxxers

could make discoveries about their own views, critically assess own arguments, deliberate and potentially re-evaluate refusal to vaccinate in the future. The objective might not necessarily be to persuade anti-vax advocates to inoculate (which is undoubtedly a very complex task), but rather to foster trustful relationships between these publics and scientific institutions, especially when it comes to discussing medical interventions like vaccines, and making them feel included in the conversation instead of being alienated and attacked.

Focusing on genuine stories from people who had positive experiences related to their physical and emotional health from getting vaccinated could be more convincing and valuable to anti-vax communities compared to unappealing statistics posted by medical providers. A good example of effective engagement is a recently established Facebook group “Vaccine Talk” targeted at parents seeking advice on vaccinations. Kate Bilowitz, the co-founder of “Vaccine Talk” group on Facebook refers to herself as a “vaccine person” in her social circle and was inspired to establish this evidence-based platform after a measles outbreak in Disneyland resort in California in 2014 (National Public Radio, 2021). The group now has over 70,000 members from over 100 different countries and encourages discussions on various vaccines against infections ranging from HPV to measles and more recently, COVID-19. According to Bilowitz, the aim of the group is to spark genuine conversations, encourage empathy and celebrate changing people’s minds (National Public Radio, 2021). The platform not only attracts people who had positive experiences with vaccines, but also sceptics, hesitators, and anti-vaxxers, and all members are actively encouraged to share their stories, including concerns and fears, which creates a safe environment for vaccine deniers to express their views in an informal environment which they seem to crave. In order to restrict the spread of disinformation, each member who responds on the chat is required to provide credible sources to support their claims, which are then evaluated by group moderators and verified before posting. To illustrate, one of the group members made a post claiming he “spent years being an anti-vaxxer” but after finding out that measles infection can cause Subacute sclerosing panencephalitis (SSPE), which is fatal in most cases, he decided to vaccinate his children and expressed gratitude that his children are “up to date” with all the vaccinations (Vaccine Talk, 2022). The post received comments from fellow members celebrating the original poster’s decision to vaccinate his children, with one of the respondents posting an article from a governmental website displaying the statistics of long-term conditions caused by measles, which further validated the ex-vaccine-denier’s decision to ensure timely vaccination of his children. Another example includes a member, a self-proclaimed “active anti-vaxxer”, who expressed his gratitude to the online community by not deleting his posts “without justifiable cause”, despite the majority of the group being pro-vaccine advocates, and also added that he has never “learned so much about any single subject so much” in his entire life (Vaccine Talk, 2022). These are just a few of many examples from the private online group, which suggest that in order to have a fruitful two-way dialogue with anti-vax communities, it is important to maintain a respectful tone, be transparent and practice active listening instead of demonizing opposing views, talking down to anti-vaxxers and dismissing concerns regarding vaccines as having no epistemic substance, which might further lead to alienation and foster antagonistic “us-versus-them” relationships between both sides. Moreover, sharing relatable vaccine experiences from hesitators, ex-vaccine deniers, or pro-vaccine advocates could help gain more trust and encourage anti-vaxxers to re-evaluate their own views in the future.

However, despite the case study suggesting that it might be possible to engage with anti-vax communities by employing civilized discussions focusing on experience sharing on social media, it has some limitations which must be pointed out. First, despite social media platforms having 4.3 billion users worldwide, access is very limited in some countries – for instance, access to social network is 33.4% in India, 21.1% in Kenya and 15.4% in Nigeria, which suggests that certain populations are

excluded from the conversation (Dixon, 2022). Furthermore, the primary language of communication in the group is English, which potentially limits the possibility to engage with anti-vaxxers who speak other languages.

Nevertheless, this approach, despite its limitations, indicates that it could be possible to engage with anti-vax advocates by utilizing vaccine-related experiences from real people on social media as a mediator to build trust for medical interventions like vaccines. Similar strategies could be encouraged on other online platforms as long as all the comments in social media groups are evidence-based and carefully moderated to prevent the spread of disinformation.

CONCLUSION

All things considered, despite the increasing number of disease outbreaks that can be prevented by vaccines and the ongoing COVID-19 pandemic affecting people's lives every day, anti-vax communities are still fairly prominent, which poses a threat to public health. As mentioned earlier, most global health institutions employ the strategy of disseminating information on the efficiency and safety of vaccines, which might not be the most effective strategy to engage with anti-vaxxers, and can be viewed as didactic due to their general mistrust of scientific institutions. In order to foster more trustful relationships, this essay suggests that a potential strategy could be to encourage citizens to build online deliberative two-way discussions on vaccination experiences on social media platforms. Despite this strategy having a handful of limitations, it could still be used as a vessel to engage with anti-vaxxers by providing a fertile ground for experience sharing and posting evidence-based information that could both have a synergistic effect in facilitating anti-vaxxers' decision-making vis-à-vis to vaccination, as illustrated by an increasingly popular "Vaccine Talk" group on Facebook. Finally, it is important to acknowledge that ultimately every individual, including anti-vaxxers, shares the same goal of staying healthy and keeping their children healthy – therefore, building a medium where both sides could deliberate on a personal level could potentially lead to fruitful engagement where the truth about vaccine efficiency and safety would reach vaccine deniers and, most importantly, become contagious.

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