

**Social Media as a Conduit for Spreading Misinformation:
An Examination of Antivaccination Messages
in the Wake of the 2019 Washington Measles Outbreak**



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Annotation

Public health experts have studied global pandemics long before the COVID-19 outbreak of 2020. Since the worldwide spread of HIV, SARS, H1N1, and Ebola among others, scholars have focused on identifying best practices for risk mitigation and reaching disparate publics to engage in appropriate risk mitigation behaviors. The 2019 measles outbreak in Washington, USA flourished in large part due to the viral spread of misinformation on social networking platforms. Due to intended openness of these platforms, antivaccination messaging became prominent, and the U.S. among other countries to have eradicated measles saw a number of outbreaks. In the U.S. in 2019, many of these occurred in Washington state. These outbreaks served as an impetus for social media platforms to reconsider their role in spreading health misinformation and its contribution to real world danger. This analysis considers open media ethics to understand social media platforms' initial decisions to allow vaccine misinformation and the role of communication scholars and practitioners have in understanding, and acting on misinformation. Using a case study approach, this article examines online discourse about the measles, mumps, and rubella vaccine, policy measures related to vaccine exemption and social media organization formal responses in 2019 directly related to the increase in U.S. measles outbreaks. Using an open media ethics framework, findings from this study illustrate the ways in which these organizations initially intended to have an open platform for health-related discussions. Further analysis demonstrates that these organizations focused on existing terms of use to put in place protective measures that would prevent further spread of this mis- and disinformation. However, conclusions draw illustrate that placing the onus on the social media

organizations alone is insufficient to prevent outbreaks such as this to occur, and as the COVID-19 pandemic began the following year, the implications of this study continue to pose questions about social media misinformation management.

Keywords: *media ethics; misinformation; social networks; user-generated content; vaccine hesitancy*

Introduction

Potential health pandemics are closely monitored by national and international health organizations. For example, both the World Health Organization and the US Centers for Disease Control and Prevention maintain lists of pandemic and epidemic diseases, and conduct rigorous influenza pandemic surveillance annually. Because of successful comprehensive childhood immunization, diseases such as polio and measles have been largely eradicated in developed countries. However, the antivaccination movement has gained traction in recent years and has led to a measles outbreak at Disneyland in California in 2015 (Aylesworth-Spink, 2016) and another in Washington state in 2019 (Kelleher, 2019). The World Health Organization named vaccine hesitancy as one of the largest global health threats of 2019 (World Health Organization, 2019).

According to the WHO, measles cases spiked dramatically in 2017. Moreover, although global coverage of the first measles immunization was at 85 percent, second dose coverage was only at 67 percent (World Health Organization, 2018). In February 2019, the CDC held a public comment period during the meeting of their Advisory Committee on Immunization Practices. There they fielded comments from individuals claiming that their loved ones experienced “documented illness and regression” or developed autism after being vaccinated (Cohen & Bonifield, 2019) despite these claims being debunked multiple times (e.g., Hviid, Hansen, Frisch, & Melbye, 2019). The primary reasons antivaccination advocates cite for their decision not to vaccinate are lack of trust in the government and pharmaceutical companies, as well as individual rights and religious freedom (Lou & Griggs, 2019).

Much of the proliferation of antivaccination content exists on social media platforms (Telford, 2019). As has been the case with other health-related crises such, such content also includes misinformation, disinformation, and mal-information (e.g., Bode & Vraga, 2018; Wang et al., 2019). The real world consequences have become increasingly clear as the world grapples with the COVID-19 pandemic (Krause et al., 2020). Long before the coronavirus pandemic, a measles outbreak erupted in Clark County, Washington (USA) with over 250 cases reported between January and March 2019. This paper argues that this outbreak served as an impetus for social media platforms to reconsider the degree to which they would allow antivaccine misinformation to proliferate on their sites. To explore this issue, this paper begins by describing communication messages and public health implications. Next, the impact of user-generated content in health contexts is presented and an open ethics approach to new media is outlined. Then, an overview of the 2019 Clark County, Washington measles outbreak is offered followed by an analysis of the case. Finally, conclusions and implications are drawn for social media communication best practices to reduce the spread of misinformation during health pandemics and other risk and crisis events.

Communication Messages, Vaccination Intentions, and Public Health

Communication scholarship has devoted notable resources and research to understanding individuals’ vaccination intentions. Certainly, a good deal of the more recent vaccine-related

communication scholarship focuses on the HPV vaccine (e.g., Wong, 2016; Pitts, Stanley, & Kim, 2017; Reno, O’Leary, Garrett, Pyrzanowski, Lockhart, Campagna, Barnard, & Dempsey; 2018; Kim & Nan, 2015; Valdez, Stewart, Tanjasari, Levy, & Garza, 2015; Xiaoli, Dahlstrom, Rangarajan, & Richards, 2015; Wong, 2014; Nan, Zhao, & Briones, 2014; Cohen & Head, 2013). Much of this work considers parental intentions regarding whether or not to vaccinate young children. In terms of information acquisition, Wolfe & Sharp (2005) explored a variety of internet search terms around immunization to uncover the provaccination versus antivaccination results. They discovered that the term “vaccination” is likely to yield a significant amount of antivaccination information, whereas “immunization” yields predominantly provaccination content. Weberling McKeever and colleagues (2016) discovered that parents opposed to vaccinations tend to speak out, while mothers who support the recommended immunization schedule remain silent. This spiral of silence may contribute to the proliferation of antivaccination misinformation.

At an individual level, Weberling McKeever and colleagues suggest that “communication practitioners and vaccination advocates should understand the factors that might encourage mothers to participate in communication about the issue” (p. 492). They suggest sharing science-based information about vaccine safety to reach individuals cognitively and emotional storytelling about the negative impacts of not vaccinating to reach individuals affectively. They argue further that this content should be easily distributable via social media. The content that goes into these messages matters. Dixon (2017) found that highlighting the consequences of non-vaccination elicits a lower negative affect than that of an identical message regarding negative outcomes of vaccination. Still, individual-level persuasive appeals are likely insufficient. Hesse and Rauscher (2016) explored family communication patterns in relation to parents’ intent to vaccinate their children. They found that “individuals coming from high-conformity and conversation-oriented families tended to score lower on beliefs, norms, and decision making related to child vaccination” (p. 65).

Policy and Vaccination Rates

A systematic review published in the *American Journal of Public Health* revealed that vaccine exemption rates are increasing, and that they do occur in clusters (Wang, Clymer, Davis-Hayes, & Bottenheim, 2014). While most exemption decisions are based on vaccine safety, some are also based on convenience. At a policy level, the study revealed that state-level exemption procedures do increase the rate of exemptions, as well as individual and community disease risk.

Public policy regarding health behavior, however, may not always be trusted by every segment of the public. For example, Quinn & Helsloot (2012) argue that the containment of the 2009 influenza pandemic shed light on the critical role of citizen engagement in containing large scale health threats. “Building trust between citizens and government is essential, particularly for minority and immigrant populations whose relationships with official government may be problematic” (p. 127). This lack of trust in government agencies resonates on the international stage, as well. Quinn and Helsloot (2012) go on to write that “the Egyptian government’s decision to cull all pigs as a means to reduce the risk of HN1 was seen by their Christian owners as a discriminatory act that was not justified by the public health science.” (p. 127).

Amid an infectious disease outbreak, Sell (2017) makes five recommendations: don’t be taken by surprise, communicate uncertainty when it exists, carefully consider and communicate policy responses, eliminate the phrase “out of an abundance of caution,” and do more research on what works. WHO outbreak communication guidelines include trust (maintain or restore trust

between public health officials and the public), announcing early (announcing incomplete information early prevents the proliferation of misinformation), transparency (remaining open about new developments over the course of an outbreak), listening (understanding the public's risk perceptions and concerns to develop effective communication), and planning (planning a response to adhere to the previously described four criterion that can translate into action) (WHO, 2008). However, these recommendations are designed for public health responses to new disease outbreaks. Applied communication scholarship can and should consider the extent to which it can promote policy shifts. They argue that “without the right of unfettered expression by those sources that often are the best able to speak for vulnerable populations, we risk becoming a society that fears what may be different, unpopular, or threatening to powerful interests” (Cox & McCloskey, 1996, p. 287).

User-Generated Content and Health

The proliferation of new media technologies has significantly impacted the accessibility of creating and disseminating user-generated content (UGC). Van Dijck (2009) define UGC as produced by “active Internet contributors, who put in a ‘certain amount of creative effort’ which is ‘created outside of professional routines and platforms’” (p. 41). Dylko and McCluskey (2012) argue further that UGC is synonymous with other concepts identified in the literature under various labels (e.g., web 2.0, produsage, citizen journalism, participatory news). The intersection of UGC, social media, and health communication is an important space for interrogation.

A good deal of research focuses on UGC's role and effects in health campaigns and health prevention contexts (e.g., Bardus, 2011; Spence, Lachlan, Westerman, & Spates, 2013; Stavrositu & Kim, 2015; Tian, 2010). Certainly, UGC has the potential to contribute positively to health inequity. Chou, Hunt, Hesse, Bechjord and Moser (2009) propose that new media technologies deliver increased chances of reaching the populations that experience health disparities. The authors add that these technologies ought to offer ways of moderating health disparities. Some scholars reject such emancipatory capacities of new media as technological determinism. These critics assert that the fact that the Internet and other digital technologies could be used to alleviate human struggles and sufferings does not guarantee that they indeed will be used for these purposes (e.g., Meek, 2000; Morozov, 2011). Alternatively, Guidry, Jin, Haddad, Zhang, and Smith (2016) discovered that, while there are known health risks of waterpipe tobacco smoking, UGC on Pinterest more often portrayed it in a positive light, and that the health risks of waterpipe smoking were not represented. Therefore, the impact of user-generated content on health beliefs and understandings deserves greater interrogation.

Open Ethics of New Media

As social media becomes increasingly engrained in society, it alters the way scholars ought to consider the role of content creation and journalism. Ward and Wasserman (2010) examine the role of citizen participation in media creation and the transformative effects this has had on journalism and its ethics. They define open media ethics in contrast to closed ethics, both of which “refer to how principles are discussed and who controls that discussion” (p. 276). Closed ethics is defined as “a form of ethics discourse where the guidelines are primarily (or only) intended for a relatively small group of people, and places substantial limits on meaningful nonmember participation in discussion, critiquing, and changing the guidelines” (p. 277). In contrast, “open ethics encourages a more open and participatory approach to the ethics discourse in question” and “would regard the

code of ethics as intended not just for professionals but also for anyone who uses media to do journalism. It allows, and encourages, mechanisms that allow nonprofessionals to engage in discussion and content reform” (p. 277).

Media ethics has traditionally been closed, with ethics discourse occurring among journalist groups like the Society of Professional Journalism without participation from ordinary citizens who haven’t experienced the newsroom, from where this set of ethics is generated. Ward and Wasserman (2010) argue that new media offers more communication space for ordinary citizens to determine the trajectory of media stories, subsequently reshaping media ethics to be more participatory.

Ward and Wasserman (2010) offer three conditions for open media ethical discourse. First, the virtue of hospitality, which “would require media to open up ethical discourse to the widest possible range of voices, including voices that contradict media ethics orthodoxy” (p. 288). Second, the virtue of sincerity “would require media to ensure that [hospitality] does not merely constitute the token incorporation of dissent in order to sustain hegemonic control of media ethical discourse” (p. 289). Third, they recognize that citizen participation may be limited by economic constraints, continuing to privilege economic elites. They argue for an open media ethics “based on the idea of meaningful participation as hospitable, sincere and truth-seeking; global, and accessible across material, social and national borders; and tolerant, respectful and self-reflective” (p. 209).

The concept of listening is central to developing an open media ethics (Ward & Wasserman, 2015). Listening “acknowledges that societies globally are marked by deep inequalities, mutual mistrust born out of historical conflicts, cultural, social and economic difference, and asymmetries in access to channels of communication” (p. 838). They emphasize that “our very humanness depends on our relation with the Other, even if that relationship is not easy and may become a burden of responsibility” (p. 828). However, “listening does not insist on full consensus or politic conversations. It aims to increase our understanding of another’s position rather than prompting us to necessarily agree with it” (p. 838). In fact, one criticism of global ethics rests with a tendency to “lapse into an ethical relativism that makes all views equal and avoids difficult conversations” (p. 846). In other words, global media ethics need not “shy away from disagreement and adversarial engagement” (p. 846).

While recognizing new media platforms as a unique space requiring an expanded understanding of media ethics, agreed upon standards must emphasize the humanity of others in this space.

New’ normative theory should be focused on determining if communication (the communication act and communication behavior) is contributing or distracting from the human pursuit towards achieving the above-mentioned virtues. Human virtues are governed by morals which find expression in and through communication” (Fourie, 2017, p. 121).

Moreover, communication ethics ought to “seek not to degrade the other and humanity through, inter alia, distortion, intolerance, intimidation, coercion, and hatred” (p. 122).

2019 Measles Outbreak in Clark County, Washington

Washington’s Clark County reported that 22 people had been infected with measles in January 2019, most of whom were children under age ten. As of March 19, 2019, the total measles infections reported was 79 cases, 73 of which were in Vancouver or greater Clark County, with the

rate of infection being approximately one new infection per day. Of the 73 cases in Clark County, 63 infected people were not immunized against the disease, and seven of those infected had an immunization status that could not be verified. Meanwhile, the CDC reported five other measles outbreaks in the United States: New York City, New York’s Rockland County, Texas, Illinois, and California. As of March 19, 2019, 268 measles cases had been reported in 2019, compared with 372 for all twelve months of 2018 (Kelleher, 2019).

Though there had been previous measles outbreaks, notably the Disneyland measles outbreak of 2015 that infected 111 people (Aylesworth-Spink, 2016; Clemmons, Gastanaduy, Fiebelkor, Redd, & Wallace, 2015), none have had the impact, both in size and policy implications, of the 2019 Washington state outbreak. Following news coverage of the Washington outbreak, social media platforms began to reevaluate their community guidelines to better address the proliferation of misinformation. Meanwhile, policymakers in some parts of the country reconsidered the exemptions that fostered a public health environment that reintroduced a nearly eradicated virus into U.S. society. The next section explains the case study approach used to understand the policy decisions that changed as the Washington measles outbreak grew.

Method

This analysis views the policy-related communication around the Washington measles outbreak through the lens of an open journalism ethic. Specifically, we focus on social media and its potential for sharing clarifying and distorting information about the measles vaccine. The study provides an in-depth analysis of Washington state’s 2019 measles outbreak to illustrate how the outbreak served as an impetus for policy change from major players in the digital communication world. We utilized the case study method outlined by Sellnow and colleagues (2009), which is particularly useful for investigating contemporary crisis events as they unfold in real-life contexts. Their approach is particularly appropriate to understand how different publics manage uncertainty and effective communication during crises (e.g., Ulmer, Sellnow, & Seeger, 2007). Moreover, this approach allows for the examination of multiple sources of information (e.g., textual material, websites, media accounts) to establish claims about the situation.

Yin (2017) explains that case study analyses can help to describe “how or why a presumed set of causal sequences” function in a given situation (p. 179). Yin (2017) clarifies further that, ideally, these explanations “reflect some rhetorically significant propositions” or “critical insights” (p. 179). This analysis views the Washington state measles outbreak as the impetus for social media organizations to increase their role as regulators of content that contributes to public harm. We use Ward and Wasserman’s (2010) open media ethics to examine the discourse around the measles outbreak in Washington state and its contribution to policy decision-making. We employ data triangulation, using multiple sources of evidence, examining social media platforms and related platforms that incorporate UGC as well as legislative responses to provide a detailed examination of the outbreak and to come to the same finding, in which we examine a singular social event “with the converged finding implicitly assuming a single reality” (p. 129). We examine the specific decisions made by social media sites and legislating bodies to respond to real world harm resulting from this case, which were communicated and published publicly. The next section offers an analysis of the policy-related communication that occurred amid the outbreak.

Analysis

As the 2019 measles outbreak in Washington unfolded, media attention focused on the role of social media platforms to provide an open space for antivaccination orientations to proliferate. Arguably, social media platforms allow for diverse voices and opinions to be voiced regardless of socioeconomic, sociopolitical, or sociocultural orientation. However, as this case study demonstrates, an open journalism ethic does require a set of standards that minimize the real-world harm done as a result of user generated content. This section describes the ways in which social media platforms provide a space for antivaccination content as well as antivaccination resistance, the role of social media platforms in curbing the spread of antivaccination orientations, and legislative outcomes stemming from this outbreak.

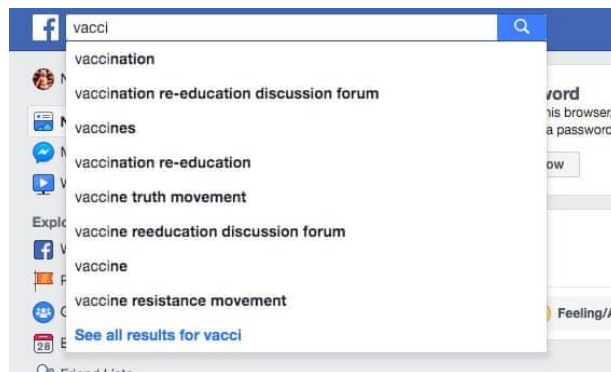
Antivaccination Content on Social Media Platforms

With the increase in disease outbreaks that had been well-contained for years, antivaccination criticism has become widespread across the internet. Manavis (2019) argues that the internet facilitated the spread of the antivaccination movement, with the UK's Mumsnet becoming an ideal place for antivaccine opinions and misinformation to proliferate beginning in 2015. Certainly, much of the antivaccination argument is linked to Andrew Wakefield's long-since debunked article linking the measles, mumps, and rubella vaccine to autism (Rao & Andrade, 2011).

However, these antivaccination online communities argue that there is a lack of open-mindedness from healthcare professionals following the recommended immunization schedules.

Facebook faced criticism for not policing antivaccination pages and content on their site. The site suggests that their community guidelines for inciting "real-world harm" were not breached by the antivaccination content. The organization told the Washington Post that, "While we work hard to remove content that violates our policies, we also give our community tools to control what they see as well as use Facebook to speak up and share perspectives with the community around them [...]. If the content they're posting crosses the line and violates our policies, we would remove the content as soon as we become aware of it" (Telford, 2018).

Moreover, the Guardian explored vaccine-related content that would appear on a new account with no friend connections on Facebook (Wong, 2019). When typing "vacci" into the search bar, the autofill options led the user to a number of antivaccination groups on the site (see image 1 below).



A similar search conducted on YouTube revealed the same antivaccination slant (see image 2 below).



Social media users in antivaccination groups go beyond posting misinformation about immunizations. They are quick to comment on posts about vaccine availability or immunization recommendations with misinformation. Some of these users employ abusive language in their rebuke of vaccines. One doctor told the Los Angeles Times that commenters referred to her as “pharma vaccine whore” or “child killer” for posting that the flu vaccine had arrived at her office. She removed the post after someone found her office address and mailed her an antivaccine book (Karlamañgla, 2019). This doctor’s story illustrates the ways in which scientists and medical professionals are being silenced online by antivaccination advocates.

Perhaps more alarming, CNN highlighted the story of a mother who lost her 2-year-old son to the flu, after which antivaccination advocates flooded her Facebook with comments calling her a “terrible mother,” saying that she “killed [her] child,” claiming that her story was fake, even denying that her son ever existed (Cohen & Bonifield, 2019). Larry Cook, founder of Stop Mandatory Vaccination, argues that antivaccination advocates experience threats from pro-vaccination individuals, but does not deny that these attacks on mothers of deceased children exist.

Alternatively, in November 2018, Ethan Lindenberger posted to Reddit a thread titled, “My parents are kind of stupid and don’t believe in vaccines. Now that I’m 18, where do I go to get vaccinated? Can I get vaccinated at my age?” (ethanlindenberger, 2018). His thread was met with numerous posts offering outlets for free vaccinations or ways to access them on his own. Additional

threads ask, “How can I convince my mom vaccines aren’t bad?” (boi_pucci, 2018), “How do I convince my mom that vaccines don’t cause autism?” (pingin107, 2019), and “My 10 yr old sister has the flu, and we have a 2 month old in the house. My parents keep procrastinating to vaccinate us despite this. They aren’t anti-vax, just lazy. What can I do?” (ThomasTheHighEngine, 2019). Social media platforms can, then, serve as a space for information sharing about vaccinations more successfully than face-to-face communication may have been.

Social Media’s Role in Culling the Spread of Antivaccination Misinformation

As the extent of the 2019 measles outbreak came to light, social media platforms were pressured to return to their regulations to determine the extent to which they were allowing harmful content to go unchecked. Just as Wolfe & Sharp (2005) identified, Pinterest saw that searches related to vaccinations were taking users to health misinformation on their platform. As a result, the company began suppressing search results on the topic in December. The organization has banned misinformation about health and unsubstantiated health cures on their platform since 2017, and evaluates content based on institutions like the CDC, WHO, and American Academy of Pediatrics. Pinterest has stated that the ban on vaccination-related content is temporary until the organization identifies a sustainable way to moderate it and prevent misinformation from appearing in search results (Telford, 2019).

On February 22, 2019, YouTube announced a ban on antivaccination advertisements on videos due to their “dangerous and harmful” material (Folley, 2019). This official position came after a number of advertisers contacted YouTube upon discovering their content was appearing on antivaccination content and at least one company (Vitacost) pulled all YouTube advertising after discovering their advertisements running alongside antivaccination content (Folley, 2019).

Meanwhile, Facebook announced in March that it would no longer recommend antivaccination pages and would block advertisements that include misinformation about vaccines. The company, which also owns Instagram, announced they would stop recommending antivaccination content on Instagram as well. Facebook stated that they will use leading global health organizations to identify misinformation and if vaccine hoaxes appear on the site they will take action against it (Thebault, 2019).

The crowd-funding site GoFundMe is often used by antivaccination advocates to promote vaccine misinformation. In March 2019, the site announced they would thoroughly review the campaigns on their site and remove any campaigns promoting an antivaccination agenda. Antivaccination groups gathered at least \$170,000 over the past four year to promote their message on Facebook and fund vaccine exemption attorneys. The organization’s terms of service ban donations to products that make unsubstantiated health claims. A spokesperson for GoFundMe addressed their commitment to policy refinement, stating “We know we have a major role to play in big issues like this, and as we continue to grow... our policies will continue to evolve to make sure we are best serving people” (Arciga, 2019).

While not a social media site, Amazon does allow for some UGC in the form of customer recommendations. It’s role as the leading online vender also makes its content easily accessible and easily shared. It is worth observing, then, that the organization announced that they would stop selling books on their site that promote unscientific methods to cure autism (Rodrigo, 2019). Amazon’s decision goes beyond the spread of misinformation by the antivaccination movement, recognizing that the books the organization has removed recommended giving children chlorine

dioxide to treat autism. In 2010, the Food and Drug Administration warned of significant health risks to consumers who may use the product for self-treatment. In each of these instances, social media platforms considered their community standards and weighed the health considerations of content that was thriving on their sites.

In a statement published on March 12, 2019, Sir Tim Berners-Lee, credited with inventing the World Wide Web, argued that, while the web serves as “a public squire, a library, a doctor’s office, a school, a design studio, an office, a cinema, a bank, and so much more,” and given voice to marginalized groups, it has had some negative, unintended consequences (Berners-Lee, 2019). Predominantly, he articulated three sources of this disfunction: 1. Deliberate, malicious intent including online harassment; 2. System design that creates perverse incentives and ad-based revenue models that perpetuate the viral spread of misinformation; and 3. Unintended negative consequences that polarize discourse.

Berners-Lee calls for the global web community to come together to “create both laws and code to minimize [deliberate, malicious intent], ... redesign systems in a way that change incentives. And ... understand existing systems and model possible new ones.” He argues that one government or social network cannot be blamed, as this does not get at the root cause of the problems. The Web Foundation is working with stakeholder groups to create a new Contract for the Web to make laws and regulations fit the digital age, ensuring markets remain open and argues companies must do more to prevent their profit goals from infringing on “human rights, democracy, scientific fact or public safety.”

Formal Legislation Proposals amid the 2019 Measles Outbreak(s)

While social media platforms were responding to the 2019 measles outbreak, some policymakers also directed efforts to antivaccination misinformation. Bringing these two stakeholder groups together, Ethan Lindenberger testified before the Senate Committee on Health, Education, Labor, and Pensions on March 5, 2019 after the story of him reaching out to Redditors in search of information to bypass his parents’ antivaccination beliefs went viral (Welch, 2019). Still, antivaccination legislation continues to be proposed, even amid the Washington measles outbreak, though most often they die in committee, where legislators recognize that they will hurt public health (Lou & Griggs, 2019). As of early 2019, 17 states allow “philosophical exemptions for those who object to immunizations because of personal, moral or other beliefs” (NCSL, 2019).

Some states have taken action (or plan to) to increase vaccination rates among children. Amid the measles outbreak, the Washington House passed legislation to remove the philosophical exemption for the MMR, with the Senate measure proposed seeking to remove the same exemption for any required school vaccination (La Corte, 2019). Oregon state Representative Mitch Greenlick is proposing a bill to eliminate any nonmedical vaccine exemptions. The Iowa state Senate rejected two bills in March that would have relaxed vaccination requirements.

At a national level, Scott Gottlieb, commissioner of the Food and Drug Administration, said that the FDA may intervene if states that allow for a wide range of philosophical exemptions to immunizations do not address the issue, arguing a growing national public health threat. He stated that, “Some states are engaging in such wide exemptions that they’re creating the opportunity for outbreaks on a scale that is going to have national implications” (Haigh, 2019). There is currently no federal law requiring children be immunized.

In terms of regulations on antivaccination social media groups, one major antivaccination group, Stop Mandatory Vaccination, saw its founder Larry Cook under investigation by the UK's Advertising Standards Authority in November 2018. The two issues that were investigated were both upheld: "1. The claim 'Parents, not only can any vaccine given at any age kill your child' was misleading and could not be substantiated; and 2. The ad was likely to cause undue distress" (Advertising Standards Authority, 2018). However, Cook chose not to act on the ASA's findings (Manavis, 2019).

Discussion

Measles outbreak serves as an exemplar to better understand the role of organizational policy to combat misinformation. The size of the outbreak prompted major social media organizations to apply new regulations to minimize the voice of antivaccination advocates online. As this study reveals, social media platforms do regulate for harmful content within their individual terms of use or community guidelines. This allows these platforms to flag content that does discernible harm. However, these regulations typically were not identifying misinformation as such. The 2019 Washington measles outbreak served as an impetus for these organizations to consider the discernible harm antivaccination misinformation contributed to in order to assess their role in contributing to the public health crisis.

These organizations were upholding the intent of the web to serve an equalizing role that allowed diverse perspectives and opinions to exist. As such, a closer look at the potential harm of online discourse and misinformation is warranted. Certainly, this outbreak demonstrates the ways in which dangerous misinformation proliferates when unchecked. However, it also illustrates the ways in which this rhetoric can be resisted using the same platforms, highlighting one way in which social media platforms to serve an equalizing role.

The 2019 Washington measles outbreak offers a number of insights into the landscape of social media, user-generated content, and the role of policy in curbing public health crises. From a theoretical perspective, this case demonstrates the ways in which an open ethics approach to new media content creation must continue to examine real world harm. While open discourse is valuable, misinformation can contribute to social harm. While offering a space for antivaccination misinformation to exist may uphold the virtues of hospitality and sincerity (Ward & Wasserman, 2010), it may have a silencing effect on individuals and organizations promoting science and public health, allowing "intolerance, intimidation [and] coercion" to spread (Fourie, 2017, p.122). Therefore, as we continue to theorize about the role of the web to allow for diverse perspectives to exist equally, we must consider ways in which an open communication and journalism ethics is consistent with a globally agreed upon standard of human rights. In order to do so, a means of regulation should be a theoretical and practical priority. Second, communication scholars ought to consider the ways in which individuals who may not hold beliefs that are consistent with antivaccination advocates prior to bearing children may be inoculated to such beliefs through the prominence of this misinformation online and in society. It is possible that, even without direct exposure to these beliefs through online antivaccination groups like Stop Mandatory Vaccinations that the controversies surrounding childhood immunizations may be enough to contribute to significant vaccine hesitancy.

This case also offers several practical implications for social media discourse and misinformation. First, applied communication scholarship should continue to study and work with social media platforms to identify ways to promote the open exchange of ideas while maintaining public health and safety. Second, communication scholars and practitioners should work to distinguish misinformation, which is shared without the intent to harm, from disinformation, which is promoted and shared with a malicious intent. If content like the antivaccination rhetoric discussed in this paper is shared by some social media users with the intent to weaken the public health, it may more clearly violate the terms of use of these platforms. Clarifying this distinction can better inform appropriate, open media ethics. Third, communication scholars should continue to explore the work being conducted with the Web Foundation to understand the complex network of actors that must come to agreement in order to provide adequate provisions on user generated content. Recognizing the unique interests of multiple stakeholder groups as they come together in an attempt to commutatively construct a shared set of standards for improving the health of online communication is a vital component of the process.

Conclusion

The 2019 measles outbreak in Clark County, Washington served as an impetus for digital communication platforms and policymakers to rethink the role of regulation in curbing misinformation about immunizations, as well as the extent to which unvaccinated individuals pose a significant risk to the greater population. Moreover, this analysis illustrates the way the measles outbreak prompted both social media platforms and policymakers to reconsider the balance between maintaining an open platform and providing restrictions on discourse that contributes to public harm. It further demonstrates the complexity of misinformation and the need to better understand when sharing such content moves from benign to malicious. As such, it becomes increasingly important to understand the ways in which user generated content reflects and/or contributes to greater societal discourse and where the line exists to intervene online. Ultimately, scholars and digital media users alike must realize the complex nature of misinformation as it spreads through social media. In doing so, perhaps the world can be better prepared to manage social media misinformation when future health pandemics and crisis events erupt. Ultimately, developing and implementing best practices learned from events such as the 2019 measles outbreak and the recent 2020 coronavirus pandemic may not only mitigate harms but also save lives.

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Conflict of interest

None.

Ethics

The material presented in this article complies with all points and requirements set forth by the Ethics Committee of Southern Illinois University (Edwardsville, USA).

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Соціальні медіа як канал для поширення дезінформації: аналіз повідомлень проти вакцинації після спалаху кору у Вашингтоні в 2019 році

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Анотація

Фахівці з охорони здоров'я вивчали глобальні пандемії задовго до спалаху COVID-19 у 2020 році. Після поширення ВІЛ, SARS, H1N1 та вірусу Ебола науковці зосередилися на визначенні найкращих практик для зменшення ризику й охоплення різних груп населення для участі в них і належної поведінки для зменшення ризику. Спалах кору 2019 року у Вашингтоні (США) процвітав значною мірою через вірусне поширення дезінформації на платформах соціальних мереж. Завдяки передбачуваній відкритості цих платформ повідомлення проти вакцинації стали помітними, і США серед інших країн, які викоринили кір, пережили низку спалахів. У США 2019 року багато з них сталися в штаті Вашингтон. Ці спалахи послужили поштовхом для платформ соціальних мереж переглянути свою роль у поширенні дезінформації про здоров'я та її внесок у реальну безпеку. Цей аналіз розглядає етику відкритих медіа для розуміння початкових рішень платформ соціальних медіа щодо дозволу дезінформації про вакцини та ролі вчених і практиків у сфері комунікації в розумінні та реагуванні на дезінформацію. Завдяки підходу тематичного дослідження в цій статті розглядається онлайн-дискурс про вакцину проти кору, паротиту й краснухи, політичні заходи, пов'язані з виключенням вакцини, і офіційні відповіді соціальних мереж у 2019 році, безпосередньо пов'язані зі збільшенням кількості спалахів кору в США. Завдяки використанню відкритої структури медіаетики результати цього дослідження ілюструють шляхи, за допомогою яких ці організації спочатку мали намір створити відкриту платформу для дискусій, пов'язаних зі здоров'ям. Подальший аналіз показує, що ці організації зосередилися на умовах використання, щоб запровадити захисні заходи, які б запобігли подальшому поширенню цієї дезінформації. Зроблені висновки показують, що покладання відповідальності лише на організації соціальних мереж недостатньо для запобігання таким спалахам, і, оскільки наступного року почалася пандемія COVID-19, наслідки цього дослідження продовжують викликати запитання щодо соціальних мереж управління дезінформацією.

Ключові слова: медіаетика; дезінформація; соціальні мережі; контент, створений користувачами; вагання щодо вакцини.

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