2022

Bodily Autonomy and Anti-Vaccine Discourse During the COVID-19 Pandemic

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International Studies Senior Thesis - Advised by Dr. Jennifer Riggan

April 29, 2022

Introduction

The phrase “my body my choice” has become a familiar chant in favor of less regulations on women’s bodies. This political stance is otherwise known as the pro-choice movement, an activist movement centered on protesting legislation that prohibits abortion access and limits reproductive rights. This movement focuses on the bodily autonomy of women whose reproductive rights are often contested in courts of law. Bodily autonomy is a concept that can be defined as one’s right to self-govern their own body, using agency (the ability to make an informed, intentional decision) and liberty (the ability to make a decision without influence) (Wicks 2016, 2-4). While this phrase was originally used in relation to this pro-choice movement, many people are now using it to describe their sentiments towards vaccine mandates. Despite advances in technology and science, providing many around the world with access to information, studies, and statistics, the movement against vaccines only continues to grow, further dividing the US and the world. This paper will look at the effect of anti-vaccination rhetoric in derailing vaccination programs, which in turn expedites the creation of vaccine mandates that infringe on autonomy. By analyzing the cyclical nature of vaccine hesitancy and autonomy one can understand how misinformation fed to the public creates harmful narratives that lead to governments or entities denying civilians a right to such autonomy.

The US is notorious for its historical infringements on individuals’ rights to bodily autonomy. From slavery, to bans on abortion, to refusing the treatment of Syphillus in black men (Brandt 1978, 21), the US has been at the center of much controversy in regards to providing and safe-guarding individuals’ rights to bodily autonomy. Despite the US’ attempt to place themselves at the forefront in the battle of “human rights”, which some argue would encompass the notion of bodily autonomy, US politicians and lawmakers are frequently opponents of

legislation that reinforces this concept. Not only have these past actions of the US sparked movements for bodily autonomy and freedom, but recent news has contributed as well, as the idea of mandatory COVID-19 vaccines begins to spark fear among the public. The question of whether or not a government should have the power to enforce a medical procedure on a population often sparks feelings of mistrust, leading many to wonder whether there is an ulterior motive within this promotion of vaccines.

What effect does mandating vaccinations have on the global population, especially when considering the immense distrust that is seen across all populations of the US? Who has authority over what goes in a person's body? To some, herd immunity attained by vaccinated populations is recognized as the greater good and is regarded as more important than any individual's rights. To others, this is seen as an infringement of bodily autonomy: the right to control one's body and the things that happen to it. The historical context of racism in healthcare in the US is very central to this debate, as well as the fringe anti-vaccine (anti-vax) movements that have become increasingly more prominent. This paper will focus on the implications of wealthy white men in spreading misinformation that leads to an increase in vaccine hesitancy, specifically that surrounding the COVID-19 vaccine. I will begin with a brief history of the anti-vax movement and its' origins, as well as a brief timeline of COVID-19 and its' vaccine creation. Following this will be a review of literature focusing on the concept of bodily autonomy. Then, I will analyze several datas consisting of speeches from wealthy white men who are anti-vax. Lastly, I will make a correlation between all of these concepts, arguing that the misinformation spread by these public figures in American society holds a large influence over the rest of the population, consequently leading to the regulation of bodies through vaccine mandates.

Context: A Brief History of the Anti-Vax Movement

The beginning of the anti-vaccine movement was seen in the early 1800s, after the movement for widespread vaccination against smallpox was developed by Edward Jenner (Dube´ et al 2015, 100). Criticisms over the use of the vaccine began to make waves in communities, prompting anti-vaccine sentiments to spread that were only heightened by compulsory vaccination orders (Dube´ et al 2015, 100). These acts, passed in the UK, were met with resistance as individuals refused to have their liberties restricted (Dube´ et al 2015, 100). As the 19th century came to an end, North America began its battle against the highly contagious smallpox disease, resulting in numerous attempts to persuade the public to get the vaccine (Dube´ et al 2015, 100). The mid 20th century marked a turning point in vaccine acceptance, as many high income countries (HIC) saw heightened acceptance of vaccination efforts, with the 1970s seeing a push for larger vaccination programs against infectious diseases (Dube´ et al 2015, 104). Such wide-scale vaccine acceptance did not last long however, as the pertussis vaccine became the topic of much unsubstantiated controversy originating in the UK (Dube´ et al 2015, 104). The controversy surrounding the pertussis vaccine stemmed from safety concerns as sources alleged the vaccine caused neurological conditions in children, prompting immense media coverage which influenced US sentiments (Dube´ et al 2015, 104). In the 1980s, an Emmy Award winning documentary about vaccines titled *'DTP: Vaccination Roulette'* endorsed similar claims to that which was spreading in the UK: that the pertussis vaccine was causing severe neurological conditions like brain damage, seizures and retardation (Dube´ et al 2015, 104). Low and middle income countries (LMIC), despite having typically been receptive to vaccine programs, found themselves too struggling with anti-vaccine rhetoric reaching their shores (Dube´ et al 2015, 105). The beginning of the 2000s marked the expansion of the internet that

allowed for fast and facilitation of anti-vaccine rhetoric that had been going on for decades already (Dube´ et al 2015, 105).

Although much of what is deemed as the original anti-vax movement stemmed from health and safety concerns, as well as resistance towards restrictions on individual liberties, there are branches within the movement that have different reasons for hesitancy. The US has not only denied and infringed on the rights of black people, but the nation as a whole has yet to acknowledge the entire chain of racism plaguing the country (systemic or institutional racism). Systemic racism is a concept that explores how a government or state, in this case the US, has systems or blocks in place that leave black people at a disadvantage, oftentimes in terms of access to healthcare, education, etc (Peek et al 2010, 2). As social media has allowed for fast and effective facilitation of each other's experiences, it comes as no surprise to hear about racism in the healthcare industry, something that has always played a big role in the development of mistrust among POC communities towards authority figures in the US. One major grievance faced by black people in relation to healthcare was called the Tuskegee experiment: what scholars speculate is just one of many experiments done on minority groups in the name of science. This was a case where the US Public Health Service, in an effort to study the course of the Syphilis virus, had denied low-income black men access to medicine for Syphilis, and subjected them to numerous procedures and monitoring (Alsan et al 2017, 1). Many of these people died since they were not allowed treatment, thus dubbing the experiment as the leading cause of mistrust among black people towards healthcare professionals (Gamble 1997, 1773). It is speculated that other experimental procedures have been done on black people throughout time, and the worry/belief that there could be another similar experiment done on them in modern-times is still prevalent (Brandon et al 2005, 954). Additionally, the same distrust that

stemmed from authority denying access to medication can be seen towards authority figures mandating people to take medication, as it prompts questions similar to, “Well if the government didn’t want to help rid us of disease then, why would they have our best interests in mind now?” The abuse of authority committed by the healthcare industry has created pushbacks from minority communities when it comes to trusting advancements in medicine like vaccines. These types of abuses are frequent in US history, prompting the question of whether or not mandatory vaccines further encourage this type of distrust and refusal of advancements in medicine.

In a study done by WHO/UNICEF Joint Report Form, “the top three cited reasons for vaccine hesitancy globally in these three years [2014-2016] were consistently: (1) risk–benefit (scientific evidence) (22%, 23%, 23%) e.g. ‘vaccine safety concerns’, ‘fear of side effects’; (2) lack of knowledge and awareness of vaccination and its importance (15%, 13%, 10%) e.g. ‘lack of knowledge of parent on benefit of immunization’; and 3) religion, culture, gender and socioeconomic issues regarding vaccines (10%, 9%, 12%) e.g. ‘due to certain religious sects(minority)’, ‘traditional cultural beliefs’” (Lane et al 2018, 3862). It is interesting that the most common reason for vaccine hesitancy is safety concerns, when viruses and diseases themselves pose direct threats to an individual’s safety. The phenomenon of not trusting science-backed advancements in medicine stems from all different sources, but perhaps the biggest contributor is the prevalence of misinformation available. Conspiracy theories and mistrust towards authority officials frames these safety concerns as actually concerns about the body, and therefore bodily autonomy. This fear of having an unknown substance injected in one’s body without consent or under coercion is very real and consequently causes lower vaccination rates due to this hesitancy.

There are numerous social and economic benefits to rolling out vaccinations for illnesses and diseases globally. Some more obvious benefits of vaccinations would be decreased mortality rates, reduced severity of infection, and wide-spread immunity (Bloom et al 2021, 1050-1052). A study looking at the efficacy of the 2 dose COVID-19 vaccine found it to be 95% effective against COVID-19 and a monumental breakthrough in introducing RNA-based vaccines to combat future pandemics and illnesses (Polack et al 2020, 2609-2613). Other benefits of vaccinations include a (more) consistent labor force, decreased stress on healthcare facilities, and reductions in money spent on developing treatments/medications (Bloom et al 2021, 1050-1052). If more people get vaccinated, the threat of infection or death by the disease is limited and reduced, allowing them to continue to work and generate profits for companies, businesses and the government. Herd immunity can be reached when a majority of the population gets vaccinated against a particular disease, which significantly decreases the stress on hospitals and other healthcare facilities, allowing them to utilize resources for other patients. Similarly, with the US government being a money-forward entity, if they can reduce the amount of money they will have to spend on future treatments, emergency packages (like stimuli checks), etc, they will. By incentivizing people to get vaccinated, the government is likely saving much more money on future healthcare or other costs. While there have been studies done proving the legitimacy of these benefits, there is still great push-back towards accepting vaccines, especially in terms of the recent development of the COVID-19 vaccine. Social media and news outlets handling of information related to COVID-19 has also led to extreme misinformation and dramatization, producing large waves of support for anti-vaccination themed posts.

Although anti-vaccination ideologies and groups have been around for decades, it wasn't until recently that researchers were able to see the direct correlation between anti-vax groups and

the reemergence of diseases that had previously been eradicated in some parts of the world due to the development of a vaccine. A case study done on the reemergence of Measles in the US, where it was previously eliminated, shows the relationship between anti-vaccination movements and the reemergence of disease since these groups have gained more popularity. Despite Measles being officially declared as eradicated from the US by 2000, there have since been several outbreaks. One of these outbreaks affected nearly 120 people in Disneyland, most of whom were unvaccinated individuals (Calderon et al 2019, 128). The extremely contagious nature of this disease, coupled with the rise in cases since its eradication are cause for concern. Many viruses and diseases continue to evolve and mutate, forming resistance to vaccines, enforcing the necessity of vaccines in the first place, so as to limit how quickly or much a virus will mutate. One can identify the link between anti-vaccination beliefs and conspiracy theories, being that they cannot truly be separated from one another, due to the suspicious and paranoid nature of conspiracy theorists to believe that the government (state, authority, etc) is an entity trying to conceal truths or mislead the public (Goldberg and Richey 2020, 107-110). Since anti-vaccination groups often fall back on claiming vaccines cause other conditions, like Autism, or have poisonous ingredients, it is on the basis of conspiracy that these groups take form. Immense distrust towards government and medicine is so prevalent that vaccines are being dismissed, allowing diseases to now reemerge and mutate, causing thousands of preventable illnesses or deaths.

While anti-vaccination sentiments are not new, nor are they completely avoidable, it is important to understand where these ideas and beliefs come from. Historically, especially in the case of the US, countries do not always have the best interests of civilians at heart. This has

created immense distrust between public officials that represent countries like the US, as they get wrapped up in the conspiracies surrounding the government.

Context: A Brief History of COVID-19 Vaccine Development

The US Centers for Disease Control and Prevention (CDC) created a timeline that lays out many landmarks from the COVID-19 pandemic. December 12th, 2019 was the first date in which a group of people were experiencing symptoms of an unknown cause, which was classified as pneumonia. By January 7th of 2020, the CDC had established an Incident Management Structure with guidelines about response to the disease. Just 3 days later on January 10th, the CDC began publishing information concerning the novel coronavirus on the website, although it wasn't until January 20th that the first lab-confirmed case of COVID-19 was found in the US from a sample taken in Washington two days prior. On January 22nd, the WHO confirmed that COVID could be spread from human to human, prompting the US FDA to announce it will take action in developing medical countermeasures to COVID-19. By the 31st, the WHO had declared the COVID outbreak as a "Public Health Emergency of International Concern" (CDC 2022, "COVID-19 Timeline"). It took until mid-March for COVID to be declared a pandemic by the WHO, following the news of the disease outbreak months prior. Two days after the World Health Organization made this announcement however, former President Donald Trump made his declaration of a nationwide emergency regarding coronavirus on March 13th, 2020.

By March 15th, states in the US began implementing shut-downs in an attempt to contain the spread of COVID. March 17th brought the first human trials of a vaccine created by Moderna Therapeutics to combat COVID-19 in Seattle, WA. The next few weeks focused on mitigation

techniques, leading to April 3rd when the CDC announced mask wearing guidelines for anyone leaving their homes. On April 30th, President Trump monumentally announced the launching of Operation Warp Speed, which was an initiative with goals to produce a vaccine as fast as possible with the inclusion of the CDC in the program. By the end of May, deaths related to COVID surpassed 100,000 in the US alone, and by September 2020, the US death toll for COVID was over 200,000, furthering the need for expedited vaccine creation.

On December 11, 2020, the FDA issued an Emergency Use Authorization (EUA) which allowed for the first COVID-19 vaccine, which was the Pfizer vaccine, to be released for use. Just three days later, the death toll in the US surpassed 300,000, which was a very large increase for such a short period of time (approximately two months after the death toll reached 200,000). This same day, December 14th, Sandra Lindsay was the first American not in a clinical trial to receive the COVID vaccine. On December 18th, the FDA issued an EUA for another COVID vaccine, this time one created by Moderna Biotech. These emergency authorizations prompted mass-vaccination by the public, with estimates of a million people who had received the vaccine by December 24th, just 13 days after the first vaccine was authorized for use. Mid-January brought on a larger US death toll of course, this time surpassing 400,000 deaths. Despite vaccination efforts by the CDC and other organizations, vaccine shortages created a blockage in mitigating the spread of the disease. The end of February brought on the third vaccine by Johnson and Johnson to be approved for use via an EUA. Guidance from the CDC on March 8th, 2021 announced that people who were vaccinated against COVID no longer needed to wear masks indoors. Just five days later, the US had administered over 100 million doses of vaccines (CDC 2022, “COVID-19 Timeline”).

Since this time, the American public has seen encouragement from public health officials to get booster shots, and in some instances, continue mask-wearing, although it was up to individual counties to implement and enforce these continued mandates. The process of developing and testing a COVID vaccine, despite public opinion, was not severely short. Just a few months after COVID began to spread and was announced as a public health emergency, vaccine trials began, allowing for momentous testing to be done as the disease continued to be spread. The main goal of the initiative implemented by former President Donald Trump was to create and circulate a COVID-19 vaccine as soon as possible, which was largely successful. Immense amounts of funding were provided in order to help with the creation and development of the vaccine as death tolls were facing stark increases. The shortened time frame in which the COVID vaccine was created sparked hesitancy among many individuals, as they were concerned with many aspects of the vaccine, such as long-term effects that could not be known since the vaccine was created so quickly and authorized under emergency circumstances.

The Role of Media

Advancements in media and technology play a huge role in the spread of misinformation among groups of people. Propaganda and rhetoric has successfully managed to infiltrate many aspects of our daily lives due to increased channels of communication. The lasting effects of propaganda have made their way into the medical realm, thereby promoting hesitancy towards these authority figures like scientists, medical professionals, etc. What role does propaganda in the media have on society? What role does it have on public health initiatives? This section of this thesis will examine the implications of media on facilitating propaganda that furthers anti-vax ideologies and hesitancy towards medical professionals.

Propaganda can be seen to target people's fears, similar to that of misinformation. Propaganda online often targets individuals who hold some kind of association to groups of people currently believing in whatever ideology is being spread. For example, people associated with those involved in QAnon conspiracies might find themselves the subject of similar propaganda that leads them down the rabbithole that is QAnon. This phenomenon is facilitated by the nature of many social media platforms, such as Twitter, which serves to give users a platform to share their beliefs and thoughts with those who may hold one's similar to them (Prier 2017, 53). Hashtags and other means give users the ability to narrow down and focus their searches online, furthering this group phenomena in which like minded people are able to access similar information to what they align with (Prier 2017, 53).

Propaganda in itself works to target those who may already believe in some aspect of the ideology. As Jarred Prier argues, "For propaganda to function, it needs a previously existing narrative to build upon, as well as a network of true believers who already buy into the underlying theme," (Prier 2017, 56). This is where the targeting of individuals comes in. Many conspiracy theories stem from real fears and concerns people have about the state of the world, or individual aspects. The notion of "fake news" becoming increasingly popular among social media users promotes an environment in which people are able to share what they believe to be the 'real news', as actual news outlets, to them, have a hidden agenda or are skewing certain information (Prier 2017, 60).

Propaganda is an extremely powerful way to disseminate information to groups of people. The malicious intent of the propaganda serves to once again, target individual fears, and weaponize them in a way that changes their ideologies to then support whatever the mission of the propaganda is. This is a very dangerous form of information dissemination that has had

lasting effects on our society as we know it. The reliance upon social media as a means of collecting information creates a means for propaganda to target individuals (Prier 2017, 59). In relation to the COVID-19 pandemic, there were throngs of misinformation and propaganda seen on social media platforms, of which many Americans rely on to get their information (Prier 2017, 59). This has certainly contributed to mistrust towards medical professionals, as people start to genuinely believe very reactionary tales concerning vaccines in particular.

Theories of Autonomy

Literature surrounding the concept of bodily autonomy seems to revolve around a moral or ethical debate. Most of the scholarship concerning the notion tends to recognize that while mandatory vaccination, at its core, infringes on bodily autonomy, it is a much more complex issue. Some scholars argue that one has a moral obligation to their country or community in getting vaccinated as it will help to protect others (Giubilini 2020, 66). Others argue that bodily autonomy comes when one can make a decision without influence or coercion, suggesting that mandatory vaccination is in fact unethical (Haire et al 2018), and actually may result in the opposite of its intended effect (Sprengholz et al 2021, 11).

Informed consent plays a key role in the concept of bodily autonomy. One cannot give consent without being “informed, mentally competent, able to understand information, and voluntarily able to decide” (Williamson 2021, 272). While mandates infringe on being voluntarily able to make a chosen decision, how can a government ensure that there is informed consent when misinformation is so prevalent? One could stand to make an argument about mandates being effective in the absence of truthful, unobscure information. If one chooses to believe a source of information that is unequivocally incorrect, but something they believe

wholeheartedly to be correct, is that their own form of informed consent? These questions are nuanced, yet important to the debate. On top of misinformation being so prevalent in society, mistrust is also common, especially within POC communities. The US has a history of neglecting and abusing black people, which has in turn created immense distrust towards health professionals among POC (Gamble 1997, 1773). A well-known medical experiment called the Tuskegee Experiment has prompted speculation of the US' involvement in other medical experiments that were swept under the rug, and the belief that there could be a modern-day version of this experiment done has increased medical distrust within these communities (Brandon et al 2005, 954). How can health professionals ensure transparency and honesty when the institutions they work for have known patterns of negligence within certain populations? This idea similarly contributes to the problematic nature of informed consent.

Moral obligation is a major concept within Giubilini's theories of autonomy, and one that this thesis primarily aligns with. Who has a moral obligation? To what are they obligated? How far does this obligation extend? Giubilini suggests that "...a state has the moral responsibility to protect and promote individuals' health, especially that of the most vulnerable people (such as those who cannot be vaccinated), by at least controlling those factors that (1) affect individual health, (2) are not under an individual's control, and (3) that the state can permissibly control," (Giubilini 2020, 54). This stance, then, implies that if a government has the ability to do so, it should take all steps within its power to reduce death and illness from the COVID-19 virus, up to and including mandatory vaccinations. Similarly, the people within a community share this same moral obligation to stop the spread of preventable diseases. Bodily autonomy (using this theory) extends from one person to the next. A possible scenario of this idea could be seen in an interaction between two people, "Dawn" and "Rick". Rick chooses not to get the COVID

vaccine and subsequently becomes sick. He goes out without a mask and talks to Dawn, infecting her with the virus. Dawn was unknowingly subject to being infected with a preventable virus due to Rick's decision. Was Dawn's bodily autonomy infringed on here? A stance like Giubilini might say yes. In the same way that voting is a privilege and, to some, a duty in the US, getting vaccinated is as well. This idea is what Giubilini calls a "negative right", a stance in which individuals have the right to not be harmed by others, which therefore places an obligation on others to then not harm us (Giubilini 2020, 34). This creates a moral obligation for others to abstain from certain behaviors or actions that could harm others or could prevent certain privileges from others (Giubilini 2020, 34).

Similarly, Giubilini makes arguments about the nature of public health initiatives, claiming, "effective protection of public health unfortunately requires some level of state coercion…in a perfect world, individuals would contribute to the protection of public health and other worthwhile causes through autonomous decisions, rather than through external impositions; if people behaved morally, coercion would not be necessary" (Giubilini 2020, 4). His statement echoes the idea that ethically, one is obligated in some sense to get vaccinated so as to contribute to the overall well-being and public health of the state and community. However, this is not the case, as many individuals place more significance on their own personal desires and beliefs than what could be deemed as the greater good in this case. Theories of 'fairness' regarding these ideas as stated by Giubilini reaffirm this notion of collective moral obligation. He states that, "fairness demands that each individual does whatever she reasonably can in order to contribute to the fulfilment of the collective or shared obligation, regardless of the actual impact any individual action would have on the realization of the collective outcome. In other words, fairness requires that any individual who has the capacity to reasonably bear such burdens makes

her fair contribution to the fulfilment of the collective obligation" (Giubilini 2020, 50). By this notion, all individuals who are able to do so must contribute to the collective obligation of getting vaccinated, and anything but is immoral or unethical. Similarly, the state has a responsibility to fulfill their own collective obligation on behalf of the COVID-19 pandemic, which would be herd immunity. Giubilini argues it is "an institutional responsibility to implement vaccination policies that at the very least guarantee the realization of herd immunity" (Giubilini 2020, 60). While these policies could be seen as coercive to some degree, Giubilini argues that it is the responsibility of the state and individuals regardless. Bodily autonomy as applied by these theories is primarily based on the whim of the state, in which, the state's responsibilities to protect the public from preventable diseases comes before one's individual right to autonomy.

The World Health Organization (WHO) claims that 1.5 million deaths a year could be avoided with increased coverage for vaccinations globally, prompting once again this moral debate, although a slightly different one (WHO 2019, "Ten threats to global health in 2019"). Preparedness for outbreaks of diseases is common for high-income countries. Through a process called vaccine nationalism, countries reserve doses of developing vaccines during a public health crisis, and as of "August 2020 the United States (US) had secured 800 million doses of at least 6 vaccines in development," (Zhou 2021, 1). Countries who have the funds are able to reserve and secure access to a large vaccine supply, while developing countries without such fiscal power get funds raised for them to buy vaccine doses, through COVID-19 Vaccines Global Access' (COVAX) Advanced Market Commitment (Zhou 2021, 8). This unequal distribution leads to many problems in regards to globalized public health initiatives. Those in developing countries are likely to face limited quantities of vaccinations, reducing how efficient and effective they are

able to roll out vaccines and slow the spread. Similarly, COVAX has no current policies in place that help developing countries access extra doses that these high-income countries no longer need (Zhou 2021, 8). These countries, already struggling to roll-out vaccine programs, face increased threats from abroad of infection. COVID-19 has been seen to have detrimental effects in areas underprepared or under-funded, "many already fighting for their survival due to climate change, disruption of ecosystems, distance, societal stress and economic isolation," (Mayer & Lewis 2020, 416). Between imports, exports, immigration and migration, there is an almost constant, if not constant, flow of people, animals and goods between nations. When larger nations are faced with significant vaccine hesitancy or refusal, this then impacts global health, as those abroad could have increased exposure due to the fluidity of the global economy, on top of not having access to vaccines or other forms of health care. This is also detrimental to their own economies and obligations to protect civilians.

Another aspect of this debate to consider is how mandatory or, in some cases, compulsory vaccinations emerge. Mandatory and compulsory vaccinations begin to be enforced when hesitancy limits the number of people receiving vaccines (Giubilini 2020, 4). As mentioned before, there is a moral argument for getting vaccinated, however, with misinformation and conspiracy theories, there has been a rise in hesitancy, thereby prompting governments to begin mandates. Mandatory vaccination has proved useful in ensuring higher rates of vaccinated children, although these restrictions are not frequently imposed on adults (Mello et al 2020, 1297), prompting rage from the public. Although Mello does argue that there should be 6 criteria met before the state begins mandating a vaccine, in the face of a global pandemic, time is a luxury, and action needs to be taken promptly and swiftly (Mello et al 2020, 1297). If enough of the population gets vaccinated in the first place, there would be no need for

mandatory vaccinations or any form of regulation on vaccines, theoretically, although that's not to place blame on civilians, as they themselves are victims of falsity. However, one cannot deny that it is a government's duty to do *something* in slowing the spread of COVID-19 and subsequent deaths, which is where coercion and incentives come into play. On top of this duty towards civilians, there is also a duty to maintain a country's economic status, which is often reliant on having a large, stable and consistent work force (Bloom et al 2021, 1050-1052). These two duties play major roles in whether or not a country decides to create a mandate.

Coercion in the realm of public health is not only unethical but prompts rash reactions from the public. Although many facets of public health do require a degree of coercion, due to vaccine hesitancy within communities, major incentives and restrictions like those seen throughout the pandemic can prompt even more hesitancy and refusal (Giubilini 2020, 4). A study of Germany and the US on vaccine policy reactance showed that, "While educational campaigns emphasizing the benefits of mandates for public health, herd immunity, and the economy may curb reactance, any mandatory regulation affecting the general population or just a subgroup, such as health professionals, can trigger detrimental behaviors that put public health at risk," (Sprengholz et al 2021, 11). This means that mandating vaccinations with the hopes of increasing those rates could actually do the opposite. Conspiracy theories have infiltrated social media and the internet, and when the government mandates, or as some see it, forces one to get vaccinated, there's something suspicious going on. It is on this basis of suspicion that anti-vaccination beliefs take root, as many anti-vax sentiments can be traced back to having conspiratorial origins (Goldberg and Richey 2020, 107-110). Although many of these theories can be disproven, misinformation has the ability to spread quickly, increasing hesitancy. This creates a direct correlation between increased vaccine hesitancy and vaccine mandates. Many

diseases that have been previously eradicated, like Measles in the US, have re-emerged, causing outbreaks and chaos in the process (Calderon et al 2019, 128), thus emphasizing the importance of vaccination and in some cases prompting mandatory vaccinations.

It is evident that most of the scholarship around this debate seems to agree that yes, mandating vaccines is an infringement on bodily autonomy, however, some scholars seem to argue that certain circumstances of this are excusable, and even ethical. While vaccinations play a crucial role in limiting the spread of disease and death, this argument is multi-faceted and needs to be analyzed as such. For those who can't get vaccinated, due to access, underlying medical conditions, etc., it is critical that those who can, get vaccinated. In an attempt to reach herd immunity, countries are able to enforce vaccination status, despite the uproar it may create. Despite being such a complex issue, there are numerous approaches to how vaccine hesitancy can be minimized, allowing for people to willfully choose to get vaccinated, rather than feeling forced.

Methodology

We have seen that the rise in media has successfully disseminated misinformation into the public sphere. Conspiracies are no longer hidden, but instead thrust into this public sphere, creating and enabling distrust in authority and governments. Vaccine hesitancy, especially that surrounding the COVID-19 vaccine, has increased significantly as seen through public sentiments. Scholars have demonstrated how the dissemination of misinformation and disinformation have both led to an increase of hesitancy concerning authority in general, and more specifically surrounding vaccines and their overall safety (Giubilini 2020 and Sprengholtz

et al 2021). However, it is important to look at the role major leaders of the US contribute to vaccine hesitancy, both at home and abroad.

This paper will analyze discourse from four popular figures among the anti-vaccine movement, Robert F Kennedy Jr, Steve Kirsch, former President Donald Trump and Joseph Mercola. These figures have made significant contributions to misinformation surrounding vaccines, especially that of the COVID-19 vaccine. In analyzing their discourse, this paper hopes to establish the links between these key public figures and their rhetoric to a rise in hesitancy experienced by the general public. In doing so, I will reveal these figures as having ulterior motives behind their discourse, such as benefiting from rises in hesitancy via prestige and/or profit. This paper will analyze the discourse patterns across all four of these accounts by upper-class, white men who all hold some kind of authority credential.

Data Analysis

Vaccine hesitancy, especially that surrounding the COVID-19 vaccine, has increased significantly as seen through public sentiments. Bodily autonomy movements have begun to gain more traction within social groups it never has before, due to it having been primarily associated with the pro-choice movement which relates to abortion access. Scholars have demonstrated how the dissemination of misinformation and disinformation have both led to an increase of hesitancy concerning authority in general, and more specifically surrounding vaccines and their overall safety (Giubilini 2020 and Sprengholtz et al 2021). Thus far I have argued that bodily autonomy in regards to the COVID-19 pandemic has been mobilized in a way that focuses on the content of misinformation rather than being based in actual fact. In this section I will analyze numerous anti-vaccination discourses from social media platforms of public figures among the anti-vax

community in the US who hold positions of influence there. In doing so, this paper hopes to reveal a pattern within the discourse that holds true across all accounts.

Robert F. Kennedy Jr

On January 23rd, Robert F. Kennedy Jr, the son of former democratic Senator and US Attorney General Robert F. Kennedy, gave a speech at the Defeat the Mandates protest in DC. This protest gave a platform for speakers like RFK Jr. to voice their opinions on mask mandates and COVID in general. During this speech, RFK Jr. made claims about the safety and efficacy of the COVID-19 vaccine, specifically referencing the Pfizer vaccine studies. In reference to the Pfizer COVID-19 vaccination authorization sent to the FDA for approval, Kennedy says this:

> There's been a million injuries, recorded in VAERS, there have been 20,000 deaths, more deaths than all vaccines combined for the last 36 years. So, what is CDC's answer and Tony Fauci's answer to that?... 'Well, the VAERS system doesn't work'

The delivery of this segment serves to further discord and distrust between citizens and the State. By framing Dr. Fauci and the CDC as untrustworthy figures, Kennedy is contributing to the polarizing nature of the issue. VAERS, the Vaccine Adverse Event Reporting System, was created to "detect possible safety problems in U.S. licensed vaccines," as per their website (VAERS, n.d. "Frequently Asked Questions"). However, VAERS is not a foolproof system, which is what was being referenced when Kennedy brings up the interaction with Dr. Fauci. Despite being made with the intention of revealing possible connections or unusual patterns that might suggest a safety concern in relation to any vaccine, the VAERS system itself does not have the capacity to detect or identify if a vaccine was what caused the adverse effects (VAERS, n.d. "Frequently Asked Questions"). By taking out of context this fact that the VAERS system is

flawed when it comes to translating such data, Kennedy further hammers down this point of healthcare systems being mismanaged and faulty, contributing to the rift between health professionals and the individual consumer. He goes on to say:

> …we are here for one reason: we love the United states of America (long pause followed by cheering from the crowd). And we know, when we say that we love the United States it means a lot of things. It means we love our history, we love our neighbors, we love our communities, we love our values, we love God-- we love all kinds of versions of God… Most of all it means we love the United States Constitution.

Within just a few sentences, RFK Jr. says the word "we" 12 times. The repeated use of this word creates an othering effect, as it dictates that everyone who is not there or who does not support this cause, is an outsider. This structure implies that those who do not support vaccine mandates and those who question the validity of the COVID-19 vaccine are true patriots, while those who think differently are not. It furthers the idea that this pandemic is an "us" versus "them" problem, rather than a global issue that everyone must work together to solve. Kennedy finishes the segment saying:

> We are watching something now that I never believed that I would see in my entire life … that one day the United States would be taken over by fascism … It's been the ambition of every totalitarian state from the beginning of mankind to control every kind of aspect of behavior, of conduct, of thought, and to obliterate dissent. None of them have been able to do it-- they didn't have the technological capacity. Even in Hitler Germany you could cross the Alps to Switzerland, you can hide in an attic like Anne Frank did … Today the mechanisms are being put in place that will make it so that none of us can run and none of us can hide.

This likening of the COVID-19 public health response to the Holocaust is not new, many other opposers of the vaccine have shared similar remarks on social media. By comparing COVID mandates and restrictions to the horrors of the Holocaust, Kennedy is drawing an inappropriate connection between state control that has led to immense surveillance and technological

advances that could be used to ‘hunt down’ those who do not get vaccinated. Although this is merely his opinion and has no factual basis, this comparison is used to invoke intense emotional reactions from the public. It upgrades the seriousness of COVID vaccine mandates and puts those who have not yet gotten vaccinated at the center of a nonexistent persecution in which they (upper class, white people) have never before experienced. This coming from the famous, wealthy nephew of the former US president John F. Kennedy reveals that his worry does not come from a place of genuine concern, but rather with the purpose of flaming reactionary fires that already exist in hesitant communities. Kennedy himself would likely never be persecuted or punished for not getting vaccinated, due to his ties to powerful figures within the US, however, to an audience of lower to middle class individuals, this can be seen as a real threat. The terms “fascism” and “control” are used several times, serving to similarly invoke alarm and urgency, due to the historical nature of these words. This play on body concerns surrounding persecution serves to further his own popularity among this crowd of supporters, while simultaneously weaponizing peoples’ real fears.

Steve Kirsch

Steve Kirsch, a tech entrepreneur and leader in spreading COVID-19 misinformation, gave a speech during the FDA’s open public hearing portion of the Vaccines and Related Biological Products Advisory Committee meeting on September 17th, 2021. Very quickly his words were misconstrued on social media accounts as many people failed to realize that he was not an actual FDA panelist, but just a community member voicing his opinion during the public open. This unwarranted legitimacy led to his misrepresented words being blasted all over social

media platforms, in which many people were outraged that supposed studies proved the vaccine was more fatal than previously mentioned. He began his speech saying:

> I'm going to focus my remarks today on the elephant in the room that nobody likes to talk about: that the [COVID] vaccines kill more people than they save. Today we focus almost exclusively on COVID death saves and vaccine efficacy, because we were led to believe that vaccines are perfectly safe, but this is simply not true. For example, there were four times as many heart attacks in the treatment group in the Pfizer 6 month trial report. That was bad luck.

The first words Kirsch chose to say here are very significant. Not only has he developed the immediate narrative that health officials are skewing data and misleading the public about death rates due to the COVID vaccines, but he has also established himself as a trustworthy, and knowledgeable activist of the 'truth'. Kirsch has taken misconstrued data and is using it to further this divide between anti- and pro-vaccine groups. He goes on to say:

> VAERS shows heart attacks happen 71 times more often following these vaccines compared to any other vaccine. In all, 20 people died who got the drug, 14 died who got the placebo. Few people noticed that. If the net all-cause mortality from the vaccines is negative, vaccines, boosters and mandates are all nonsensical. This is the case today.

Once again we see this misrepresentation of what the VAERS system is. VAERS cannot and does not have the capability to draw conclusions or relationships as to whether a heart attack or other symptom occurred as a result of receiving a vaccine, and this goes for all vaccines. It is evident from these statements that Kirsch is taking out of context many things that will bring a cause for concern to those listening. Similarly, COVID vaccines have been controversial before they were even beginning to be distributed. The US public has held hesitant sentiments towards these fast-developing vaccines, so it is not unfounded to assume that perhaps, after receiving a vaccine that one was already hesitant and nervous about, they began to feel and report symptoms

more exaggeratedly. Furthermore, the placebo effect could be playing a role in the symptoms one believes they have; the brain works in interesting ways, especially in times of stress. The large controversy surrounding these vaccines can lead one to believe that some of these reports may have been falsified, as the VAERS system does not have a way of verifying these reports (VAERS, n.d. "VAERS Data"). Kirsch continues:

> Death rates… this shows that the all-cause death to life rate in three cases … Even if the vaccines had 100% protection, it still means we kill 2 people to save one life. Four experts did analyses using completely different non-US data sources, and all of them came up with approximately the same number of excess vaccine-related deaths: about 411 deaths per million doses. That translates into 150,000 people have died…

Here, Kirsch uses statistics and data shown on a fast-moving slideshow to appoint himself with credibility. Kirsch, who has founded the COVID-19 Early Treatment Fund (CERF), has been able to develop influence within anti-vax groups, as they are led to view him as a medical professional, or something alike (Steve Kirsch, n.d.). He then takes this data, misconstrues it to fit his point, and makes relationships between things where correlation cannot (yet) be proven. That last sentence, where he says "150,000 people have died [from the COVID vaccine]," is an enormous leap, that not only has unfounded origins but is, at the same time, very frightening. Many of those who are hesitant share grave concerns about the safety of these treatments, and by alleging that a large number of people have died, consequently, from these treatments, Kirsch furthers the distrust within public health authorities. Similarly, the thought of being mandated to put these 'unknown' substances in one's body, while these are the death rate figures being given to you, is obviously cause for concern. In addition, the vast information he gives, with little to no verbal explanation, prompts the audience to only take away the large, terrifying numbers that he is pointing to. Upon further review, one may be able to see where he derives his data from, but to the average citizen, all that is registering are the fear-mongering

statistics being rambled. The fast-paced speech also serves to confuse and jumble words and meanings to the average American. Lastly, he says:

> Now the real numbers confirm that we kill more than we save … Early treatments are a much better alternative to boosters. The proof is that in Israel cases are at an all time high. In India, Uttar Pradesh is not COVID-19 free as of today-- almost nobody there is vaccinated.

First, saying "the real numbers" is essentially saying that the data that had been presented previously is not 'truthful', and that the data he is presenting is. Despite taking the VAERS information out of context, and misrepresenting all of the data he references, Kirsch still builds on the narrative that the government and other authorities are lying to the public, and that he holds the true answers. It is interesting that his speech ends with him suggesting that the public focuses on "early treatments", which is something he has personal stakes in, as he founded the CERF, as previously stated. Upon going to his website, www.treatearly.org, there is a large donate button that pops up on the top right corner. It is crucial to recognize Kirsch's personal stakes in developing early treatments rather than continuing the use of the COVID-19 vaccines. He is receiving large sums of money from his followers, to fund his 'work', that consists of encouraging people suffering from COVID-19 afflictions to try untested and unproven drugs that already exist on the market. Not only is this dangerous, but it is also immoral, as he is using the pre-existing hesitancy of the community for personal gain. Kirsch is clearly misconstruing data to be used in his favor. By contributing to pre-existing hesitancy and fears among individuals, Kirsch is implicitly encouraging individuals to utilize his own 'treatments' and medicines.

Former President Donald Trump

Donald Trump, former US President, is similarly known for his negative opinions on vaccines. On March 28, 2014 he posted a Tweet about pediatric vaccines causing Autism, a common misconception within anti-vax groups that has been repeatedly debunked. This was not his first nor his last time posting misinformation concerning vaccines, but the timing of this Tweet is important, as it came less than a year before his bid for presidency. The Tweet reads: "Healthy young child goes to doctor, gets pumped with massive shot of many vaccines, doesn't feel good and changes - AUTISM. Many such cases!" (Donald Trump, 2014). It is common in the US for children to be frequently vaccinated, at different milestones in their lives, to prevent possible transmission and outbreak of disease within their small and vulnerable bodies. There are also a few vaccines like the MMR (Measles, Mumps and Rubella) vaccine that combine multiple shots into one dose to provide quicker, more effective protections against those illnesses, which is what the audience can infer Trump is referencing here.

The capitalization of the word "Autism" puts the reader in a place of shock. Capital letters are frequently used to invoke fear and authority, as are exclamation points as seen at the end of the tweet. What Trump is denoting through his post is that healthy children are going to go to the doctors, who are supposed to protect the community from disease, where they will become vaccinated and inevitably contract this disability. This message is extremely ableist, as it frames those with Autism as not being able to live long, happy, and full lives, which they usually can, especially given the resources accessible today. The tweet also provokes mothers, fathers and caregivers alike to be concerned with the health and safety of medications and treatments given by healthcare providers. In order for this message to reach a large audience, Trump invokes emotion by playing on the deepest fears of any parent or guardian: that their best

judgment in keeping their children safe can ultimately lead to their impairment, at the behest of doctors and nurses.

It is also critical that we analyze the stakes at play for Donald Trump's presidency. After years of posting anti-vaccination sentiments and concerns, he continued to feed into this fear towards those who are supposed to be 'trusted' government officials. This is what ultimately led him to win the 2016 US Presidential Election, due to his appeal of being a non-politician, but rather a concerned businessman who plans to get the country back on track. A vast majority of his candidacy and presidency revolved around utilizing the phrase "fake news", which was generally aimed at media outlets, democrats, and health officials alike. During his presidency, he continued on in this light of being 'honest', even brutally, at times. It is interesting to see how his campaign had allowed for him to amass millions of followers, as he left a trail of misinformation behind him. One can speculate that Trump's presidential victory might have never been, had he not fueled the fires of hesitancy and mistrust within Americans. Furthermore, it is evident that Donald Trump had motives in gaining prestige among a 'silent majority' in the US.

Joseph Mercola

Lastly, this paper will analyze the website of Dr. Joseph Mercola, who has also been at the forefront of the misinformation brigade surrounding COVID-19 vaccines. He has amassed over 360,000 followers on Twitter and over 415,000 on Instagram, and uses these platforms to promote numerous anti-vax sources, as well as his own website. Dr. Mercola has gained his following, specifically that of Instagram, by promoting alternative medicines and practices to help people maintain good health, however, upon exploring his website, it is much deeper than that. The desire to utilize alternative forms of medicine can be seen to stem from pharmaceutical

costs, as well as other concerns revolving around medication and its impact on health. Many people are looking for natural remedies to keep their bodies in tip-top shape, which Mercola preys on.

For the most part, his website (www.mercola.com) takes on the form of a blog, where he creates posts with reactionary headlines that read things like “How COVID Patients Were Over-Treated to Death” and “The Plan to Turn You Into a Genetically Edited Human Cyborg” (Joseph Mercola, n.d.). These headlines are meant, as most media headlines are, to stir emotion within the readers. In this case, the headlines are preying on worry and fear between individuals and the state, which includes state-sanctioned groups like healthcare workers. Despite many of these titles being absurd, they serve as more than mere clickbait. It is easy to see how people fall down the rabbit holes of conspiracy theories, and these articles just purport that even further.

The problem with Dr. Mercola’s website comes when the viewer realizes you have to pay for access to his “censored library”, which contains thousands of articles containing vast arrays of misinformation, especially that regarding the COVID-19 pandemic. For a mere $5 a month, or $50 a year, subscribers can access all of these ‘forbidden’ articles, which have been portrayed to contain important information that the government, and media, want to hide from the public. This hidden content creates immense appeal to those who already mistrust health officials, especially after the 2016 US Presidential Candidate, Donald Trump, whose tag-line was “fake news”. Based on the fact that the most alluring articles are from his paid subscription program, it is made clear that Mercola is making a vast profit off of hesitant people, exploiting their fears in the process. His credentials in the health industry, being a board certified family medicine osteopathic physician, according to his website, allows him to frame himself as a trustworthy

advocate for natural health remedies (Joseph Mercola, n.d.). Mercola even links his storefront, Mercola Market, in which he sells supplements, purifiers, and other organic and natural products.

Although all of these men have their own personal interests at heart, they all share similar characteristics. The dissemination of mass amounts of misinformation has stemmed from all four of these men, and they have allowed for the facilitation of such absurdities across all forms of social media, invoking intense emotion from readers. It is evident through these numerous anti-vaccination accounts that the opinions of wealthy white men who maintain positions of authority within the US are able to reach large audiences, and ultimately influence the country greatly. Not only do each of these men post their sentiments with ulterior motives at hand, but they use language that invokes an "us versus them" narrative, and frames those who are hesitant towards vaccines as an oppressed minority. This increases hesitancy and almost encourages rebellion, as those who are reading these messages feel they have backing from some authority. The rise and spread of misinformation and disinformation serve to further political polarization, thereby limiting the efforts of public health officials to distribute vaccines that have shown to protect against COVID-19.

Conclusion

Concerns about the safety and efficacy of vaccines, especially regarding the quickly developed COVID-19 vaccines, are completely valid. Vaccines are complex and hard to understand on an individual level, with communication between scientists and the public severely lacking. Public health attempts at encouraging vaccines within the US have often come off as coercive, which is a cause of alarm to many. While misinformation surrounding vaccines continues to make its resurgence among socioeconomic groups of all kinds, vaccination

initiatives are beginning to be derailed, prompting governments to mandate, or restrict, unvaccinated individuals access to certain public facilities. These mandates increase hesitancy among people as their fears about safety and mistrust of the government collide. If misinformation was not perpetrated and propped up by trusted members of the public in America, perhaps there would not be an ever-growing group of people who are either hesitant or simply refuse to get vaccinated.

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