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Policy Entrepreneurs and the Advocacy for Vaccination During the COVID-19 Pandemic

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The article draws on Kingdon's Multiple Streams Framework to examine the policy entrepreneurs that emerged, the windows of opportunity they identified, and the strategies they used to advocate for mass vaccination during the COVID-19 pandemic. The article indicates that politicians, public figures, and governmental and non-governmental organizations played the role of policy entrepreneurs. The article asserts that the problems of high morbidity, mortality, and economic challenges due to the COVID-19 pandemic have social equity implications. Although COVID-19 vaccines are available, there is low political support for vaccination. The article draws attention to the problems, politics, and challenges of asserting COVID-19 vaccination policies. It reports on windows of opportunity policy entrepreneurs identified, and what strategies they used to advocate COVID-19 vaccination, and offers policy implications for addressing social equity concerns and other challenges facing the U.S. economy.

Keywords: Multiple streams framework; Policy entrepreneur; Advocating COVID-19 vaccines; Agenda setting; Social equity

Following reports of coronavirus disease (COVID-19) by 190 countries, the World Health Organization (WHO) declared the disease a pandemic of global concern on March 11, 2020 (WHO, 2020a). During an Extraordinary G-20 Summit on COVID-19, the Director-General of WHO called for leaders to commit to whatever effort it took to overcome the pandemic, including a resolution that conceded to mass immunization of the public against COVID-19 (Thomas & Terry, 2022). In the U.S., political leaders expressed contrasting views. Conservatives played down the seriousness of the virus to protect the economy; however, liberals insisted that COVID-19 was a public health issue that required government action (Dimitrijevska-Markoski & Nukpezah, 2023).

In any event, COVID-19 negatively affected the economy and households worldwide (Benavides & Nukpezah, 2020; Debata et al., 2020). As of March 2022— two years after WHO declared COVID-19 a global pandemic— more than 300 million COVID-19 cases had been declared globally, with over 60 million of those cases reported in the U.S. (WHO, 2022).

The statistics paint a grim picture of the situation. COVID-19 contributed to social inequity in society. The disease was a wicked problem that required collective effort from multiple stakeholders (Soujaa et al., 2021), and had more adverse effects on Black, Indigenous and People of Color (BIPOC) (Fleming & Williams, 2021; Riccucci, 2021), the homeless (Benavides & Nukpezah, 2020), and therefore, presented social equity issues (Brearley et al., 2013; Chang et al., 2018; Levine & Robins-Browne, 2009). The U.S. reports high levels of income inequality and poor health indices for BIPOC (Norris & Gonzalez, 2020). The COVID-19 pandemic uncovered issues of structural racism in the U.S. (Norris & Gonzalez, 2020). Also, COVID-19 intensified racial and ethnic tensions that induced national protests for racial and social justice reforms (Norris & Gonzalez, 2020). Therefore, any solution proffered to the COVID-19 pandemic could, therefore, be one addressing social equity concerns.

By dint of hard scientific work, the U.S. Food and Drug Administration (FDA) approved three vaccines starting in December 2020 as safe and effective for use. Following Pfizer's promising vaccine, which had an efficacy rate of 95% for emergency use, two more vaccines were approved—Moderna and Johnson & Johnson Janssen (FDA, 2020). The vaccines' approval came when the country was desperate for a solution. An initial agreement between Pfizer and the U.S. federal government was to provide 100 million doses of the vaccine, funded by the Coronavirus Aid Relief and Economic Security (CARES) Act. The Act ushered in some help for society and the economy and ensured that all eligible individuals could get the vaccine at no cost to them or their insurance. The vaccines were initially approved for adults 18 years and older and later expanded to other groups: first 12-17-year-olds and then 5-11-year-olds by October 2021 (FDA, 2022a, 2022b). As a layer of additional protection, the FDA approved COVID-19 boosters for children and adults five years and older (FDA, 2022a, 2022b).

Since the discovery of vaccination in 1796, it has served as a health intervention tool to protect against morbidity, mortality, the spread of diseases, and a possible outbreak of pandemics (Henderson, 1997; Plotkin, 2014). The FDA ensures that developed vaccines meet regulatory requirements to protect the public's health (FDA, 2020). Three CARES Act packages were approved, first by efforts of the Trump administration and second by the Biden administration, to fund vaccine distribution. The Biden administration also implemented the Operation Warp Speed, initiated by the Trump administration, and created the COVID-19 task force to fund vaccine development and minimized the impact of the pandemic (Bae et al., 2020). These efforts facilitated the path to normalcy. Research suggests that fully vaccinated individuals aged 65 years and older reduce their risk of COVID-19 hospitalization by 94%; and there is a 64% reduction in the risk of COVID-19 hospitalizations among those that were partially vaccinated (CDC, 2021b), suggesting that vaccination is a viable option to combat the COVID-19 pandemic.

Despite the best efforts by governments to promote vaccination, many communities had a strong hesitancy to it (Wynen et al., 2022). Only about 64% of the U.S. population was fully vaccinated as of March 2022 (WHO, 2022). Yet, aggressive variants continued to be identified. According to the Centers for Disease Control and Prevention (CDC), the Delta variant of COVID-19 became the dominant strain in the U.S. in June 2021 (CDC, 2021d). The Omicron variant became the dominant strain in November 2021 (CDC, 2021c), and there were concerns that more potent strains could emerge.

The COVID-19 pandemic was, perhaps, the most severe public health concern the U.S. has experienced since the AIDS pandemic of the 1980s. However, mixed messages, lack of political support characterized by partisanship, and the public's mood toward a mandatory

vaccine prevented such a policy from getting on the agenda. Concerns for receiving vaccination focused on human and privacy rights (Perry, 2021; Weise, 2020), doubt about the vaccine's efficacy (Largent & Miller, 2021), and fear of contracting COVID-19 and developing health issues through the vaccines (CDC, 2021f; Van De Riet, 2022). Some have decided not to receive the vaccine because of denial (Largent & Miller, 2021). Such people thought that COVID-19 was a hoax and that it was produced to halt some political agenda (Lovelace Jr., 2020).

Nevertheless, policy entrepreneurs, actors who invest their efforts in setting the political agenda and directing the public's attention to issues that ensure future policy outcomes even when they lack the resources to effect policy changes (Cohen et al., 1972; Gofen et al., 2021; Mintrom, 1997), addressed those fears. With the COVID-19 as an emergency formally ended on May 11, 2023 (HHS, 2023), scholars and practitioners can learn from the role policy entrepreneurs played in combatting the COVID-19 pandemic. Especially what they did to ensure an increased acceptance of COVID-19 vaccination. The research question meriting attention is: How did policy entrepreneurs advocate for COVID-19 vaccination? Specifically, the study is interested in identifying (1) the policy entrepreneurs that emerged, (2) the policy windows they identified, and (3) the strategies they used to advocate for COVID-19 vaccination.

The article draws from Kingdon's Multiple Streams Framework (MSF) (Kingdon, 2014) to identify windows of opportunity (significant events and occurrences that could trigger policy actions) that ensure that streams of problems, policy, and politics that policy entrepreneurs identified, come together for a chance to advocate for COVID-19 vaccination among the population. It employs literature and documentary reviews in its methodological approach and finds evidence in support of the Multiple Streams Framework.

The article reveals that the role of policy entrepreneurs during the COVID-19 pandemic was filled by individuals, groups, and organizations active in public, private, and nonprofit organizations. It reports that policy entrepreneurs utilized windows of opportunity, such as government policy decisions, to advocate for COVID-19 vaccination. They use strategies such as voicing their trust in the government and scientists, getting vaccinated themselves, loosening restrictions for those who were vaccinated, and sharing COVID-19-related information likely to increase voluntary acceptance of vaccination.

The article offers several policy implications. It draws attention to the need for vaccination and offers strategies for public sector organizations to champion it. It offers suggestions, including the need for policy entrepreneurs to continue to identify windows of opportunity, refine their strategies, and be assertive in conveying information from politicians and bureaucrats to the public. Lastly, it champions social equity among various groups in society. Given that high morbidity and mortality issues adversely affect minority groups, vaccination is a social equity issue that likely improves opportunity for minority groups and contributes to improving the economy (Gadson, 2020).

Multiple Streams Framework (MSF): A Theoretical Framework

The multiple streams framework (MSF) offers an opportunity to understand how policy entrepreneurs identify windows of opportunity to couple problems, policies, and politics. Like the garbage can model (Cohen et al., 1972), the multiple streams framework (MSF) states that the problems, policy, and political streams are independent streams, but under the right circumstances, and with the assistance of actors—policy entrepreneurs— these three streams come together and create windows of opportunity for issues to gain the attention of the majority to put on the governmental agenda (Kingdon, 2014). Kingdon's MSF pays particular

attention to identifying the problem (the initial stage in policymaking) and differentiating between the two processes (politics and the policies) (Djordjevic, 2020; Kingdon, 2014, p. 196).

The problems stream has to do with different issues that capture the attention of people either by "systematic indicators", focusing events, or feedback (Kingdon, 2014, pp. 90–91). These indicators are noticed during routine audits of activities, such as unemployment rates, monitoring mortality rates, or immunization rates (Kingdon, 2014). Focusing events such as pandemics and natural disasters are rare and capture the attention of the general population and cause frequent conversations to emerge about the problem (Herweg et al., 2018; Kingdon, 2014). These existing problems interfere with citizens' ideal state and call for government intervention to solve the problem (Herweg et al., 2018). The dilemma with an ideal state is that everyone does not see the issue in the same way, or as an issue. Finally, feedback informs policymakers of issues with current policies that do not meet their expected goals (Herweg et al., 2018). Of course, policymakers cannot devote their time to all of the problems that come to their attention; what receives attention depends on what is currently on the agenda (Herweg et al., 2018). The problem stream is ready for coupling when the issue can be coupled with at least one policy proposal (Herweg et al., 2018).

The policy stream is where various ideas are presented by way of publications, formal and informal meetings, papers, hearings, and testimonials by the policy community (Herweg et al., 2018; Kingdon, 2014). Ideas are refined and changed as they are debated (Herweg et al., 2018; Kingdon, 2014). Actors in the policy stream, persuade one another that their ideas offer better policy solutions (Herweg et al., 2018). Policies that cannot be implemented as a result of controversy, conflicting values, lack of majority backing, or incurs a high cost, are unlikely to survive the initial policy process (Herweg et al., 2018). To illustrate, during a global pandemic, such as COVID-19, politicians may have multiple policy recommendations that compete for acceptance, adoption, and implementation. However, because re-election is a desirable outcome for politicians, policy choices that jeopardize re-election chances are not selected (Kettl, 2020). The policy stream is ready for coupling when at least one solution to the problem is identified and has the majority support of the public (Herweg et al., 2018).

The political stream has a great deal to do with the "public mood, pressure group campaigns, election results, partisan or ideological distributions in Congress, and changes of administration" (Kingdon, 2014, p. 145; Sledge & Thomas, 2021). The national mood, completely separate from public opinion, implies that at times, the majority of the country is thinking along the same lines, the mood swings back and forth, and politicians can recognize and react to the national mood (Herweg et al., 2018). The pressure group campaigns, or interest groups, play a major role in the political stream. If the interest group does not favor a policy, it is unlikely to survive (Herweg et al., 2018). Likewise, during changes in administration, old policies are often disregarded, and new policies are placed on the agenda (Kingdon, 2014). Problems that merit policy attention are placed on the political agenda through the process of bargaining (Herweg et al., 2018). Identifying exactly when the political stream is ready for coupling is extremely difficult to pinpoint. In short, the political stream is ready for coupling when the political actor has a majority backing or is willing to find a majority backing for the proposed policy (Herweg et al., 2018).

Policy windows [windows of opportunity] are defined as opportunities for policy entrepreneurs to advocate for attention for their policy solutions (Herweg et al., 2018). Policy windows may open as a result of pre-planned events or occurrences such as city council meetings or unplanned events such as power outages throughout the state (Douglas & Ferman, 2021). Policy windows are typically opened in the problem stream (during a focusing

event) or the political stream (during changing administration) (Herweg et al., 2018). These streams are opened for a short amount of time and close without warning. In some instances, there is no correlation connecting the problem with a solution (Herweg et al., 2018), making it challenging for the policy window to open. It is also unlikely that the window will open when government officials are seeking another term during traumatic events (Herweg et al., 2018). The government may be more willing to address problems that are less distressing and open windows of opportunity that proves its willingness to act (Herweg et al., 2018).

Policy entrepreneurs are individuals, government organizations, and non-government organizations that seek to gain support in the policy stream from the policy community to ensure that a policy moves forward to agenda-setting and implementation (Herweg et al., 2018). Policy entrepreneurs inform and educate society on focusing events, push for innovative policy alternatives, create operational roadmaps for success during focusing events, and frame problems so that there is only one viable alternative (Cairney, 2018; Djordjevic, 2020; Gofen et al., 2021; King & Roberts, 1987; Mintrom, 1997).

To ensure they are successful, policy entrepreneurs sample and combine policies from different realms of knowledge (Arnold et al., 2017). Policy entrepreneurs skillfully identify and take advantage of windows of opportunity in which the problem, policy, and political streams are likely to converge (Gofen et al., 2021; Kingdon, 2014). As advocates for controversial issues, they risk their political capital in anticipation of future returns and function as a catalyst to move policy ideas to policy innovations (King & Roberts, 1987; Mintrom, 2019). They bring attention to policies using (1) narratives combining facts, values, and emotions to draw attention to certain issues over others; (2) presenting possible solutions to policymakers when there is increased attention, and the decision window is open; and (3) adapt to the environment to create a windows of opportunity to put the policy on the policy agenda (Cairney, 2018).

Policy entrepreneurs perform three specific functions (King & Roberts, 1987): (1) The intellectual function in which policy entrepreneurs exchange ideas because they are interested in what other policy entrepreneurs are thinking and doing. (2) The strategic function in which policies and procedures are implemented to persuade the political market. (3) The activist function in which policy entrepreneurs lead by example to get support for policies. Collaboration is fundamental to the development and advocacy of policy change (Mintrom, 2019). Policy entrepreneurs who are directly connected to constituents are more successful in gaining support for policies they favor (Arnold et al., 2017). Under the right circumstances, policy entrepreneurs ensure that the problem, policy, and politics couple and work concurrently for a policy to get on the political agenda (Kingdon, 2014). Once the policy is on the political agenda, viable alternatives are argued, adopted, and implemented. Although the three streams function separately, they are more successful when they conjoin (Kingdon, 2014). Rationality during a public health event depends on the policies and the delivery of those policies by policy entrepreneurs. The following section draws from the MSF to identify the problems, policies, and politics associated with COVID-19.

COVID-19 Problems, Politics, and Policies

COVID-19 Pandemic—the Problem

The spread of COVID-19 adversely impacted the U.S. It resulted in the loss of lives, impacted minority racial groups, and adversely affected economically disadvantaged groups, and revealed social and economic inequalities in society (Koh et al., 2020; Gadson, 2020; Rossen et al., 2020; Wu et al., 2020). Table 1 summarizes the COVID-19-related challenges. As of March 2022, more than 967,000 COVID-19-related deaths had been reported in the U.S.

(WHO, 2022). The disease infected more than 75 million people in the U.S. Available statistics suggest that older adults and those with underlying health conditions were more severely affected by COVID-19 and were likely to succumb to death. CDC (2020) reported that more than 81% of COVID-19 deaths occurred in people over age 65 years.

Another problem posed by the pandemic was the unintentional spread of COVID-19 by infected younger individuals who may be asymptomatic (Day, 2020; Dongsheng et al., 2020; Mogi & Spijker, 2021; Schuchat & CDC COVID-19 Response Team, 2020). When this group mingled with unsuspecting vulnerable populations, the contagion spread and caused more harm (Schuchat & CDC COVID-19 Response Team, 2020). At the beginning of the COVID-19 pandemic, more than 20% of younger adults under 30 years accounted for the active COVID-19 cases (Maragakis, 2020). Over 70% of the spread of COVID-19 was by young adults aged 20 to 49 years (Monod et al., 2021). After being isolated for two years, many young adults were eager to return to normalcy and were letting their guards down, making them more susceptible to COVID-19 and the elderly population more vulnerable (Barron et al., 2022).

Furthermore, the emergence of potentially more dangerous variants of COVID-19 spiked reported cases of infections and exhausted frontline healthcare workers (CDC, 2021a; Dyer, 2021; Kim et al., 2021). The high hospitalizations due to severe cases of COVID-19 contributed to employee burnout in the healthcare sector (Barello et al., 2020; Jalili et al., 2021; Sultana et al., 2020). While many organizations shut down due to spread of diseases, hospitals remained open to serve the public and to care for families in need, exposing their staff to the disease (Hall, 2020; Walton et al., 2020). Hospitals filled up beyond capacity causing many employees to work beyond the normal schedule (Holmgren et al., 2020; M. G. Klein et al., 2020). Despite the challenges of personal risk of infection, healthcare workers continued to provide care for patients (Hall, 2020; Mehta et al., 2021, p. 226; Walton et al., 2020). Understandably, the stress placed a toll on their lives.

Healthcare workers' hesitation in receiving the vaccines even as they administer them to their patients was another challenge that increased the risk of spread among healthcare providers. This complicated the need for more healthcare workers as many risked losing their employment as some organizations mandated employee vaccination (Breuninger, 2022).
Furthermore, the pandemic resulted in economic woes for the country, characterized by high unemployment rates and exacerbated government spending issues (Blustein et al., 2020; Gangopadhyaya & Garrett, 2020; Kawohl & Nordt, 2020). The unemployment rate in the U.S. drastically increased with the COVID-19 pandemic. In March 2020, the U.S. unemployment rate was 4.4% (U.S. Bureau of Labor Statistics, 2022); one month later, the unemployment rate rose to 14.7% (U.S. Bureau of Labor Statistics, 2022). Unemployment was the highest in industries providing in-person services amongst workers without a college degree, part-time workers, and racial and ethnic minorities (CRS, 2021), further widening the social inequalities in society. "Disproportionate high rates of infection, hospitalization, and mortality" are prevalent in "oppressed and disenfranchised communities" (Norris & Gonzalez, 2020, p. 1). Many people in these groups applied for unemployment benefits, one of the items listed in the CARES Act to aid during the pandemic, further increasing the national debt.

Table 1. COVID-19 Problems

- Business closures and soaring unemployment rates
- Conspiracy theories and aversion toward vaccination
- Souring social equity challenges
- Economic recession
- Exhaustion of frontline healthcare workers
- Unemployment of healthcare workers in self-mandating COVID-19 facilities
- High morbidity and hospitalizations
- High mortality rates
- Increased poverty and related challenges
- Pressure on healthcare facilities
- Social exclusion due to quarantining
- The emergence of potentially more dangerous variants of the COVID-19
- Unintentional spread of COVID-19 by asymptomatic individuals

Sources: From Authors based on literature review

COVID-19 Pandemic—the Policies

COVID-19 Protocols and policies changed during the pandemic. Table 2 reports these protocols and policies since March 2020. Most Americans were unaware of COVID-19 until March 13, 2020, when then-president, Donald Trump, declared a nationwide emergency, two days after WHO declared COVID-19 a global pandemic, amidst reports of patients experiencing fever and shortness of breath in Wuhan, China in early December 2019 (CDC, 2021c; WHO, 2020a). The next day, CDC issued a "No Sail Order" for cruise lines, and it was not long before U.S. states, starting with New York and Ohio, shut down their schools, restaurants, and bars to prevent the spread of COVID-19 (CDC, 2021c; WHO, 2020a). COVID-19 protocols advanced with social distancing measures, the passing of the CARES Act, proper handwashing guidelines, increased sanitizing, mask guidelines, and recommendations for all to wear mask outside the home by April 3, 2020 (CDC, 2021c).

In November 2020, mortality and morbidity rose exponentially. Fortunately, Pfizer's COVID-19 vaccine became available for emergency use authorization. This was followed by the authorization of the second vaccine (Moderna), and a third vaccine (Johnson & Johnson's Janssen) (CDC, 2021c). Healthcare professionals, nursing home residents, and the elderly were the first groups to receive the vaccine (CDC, 2021c). Because of the resistance and slow progress of many willing to accept the vaccine, many states extend the option of vaccination to anyone aged 18 or older to receive the Pfizer, Moderna, or Johnson & Johnson's Janssen vaccine (Treisman, 2021). Vaccines were strongly recommended in some states and other states attempted to issue mandates to their residents (CDC, 2021c). By Mach 2021, protocols allowing fully vaccinated individual to gather indoors without masking were issued (CDC, 2021c).

Information on available vaccines were readily accessible. Most residents could go on their state's department of health website to find a location, identify the vaccine offered, and determine eligibility (Mississippi State Department of Health, 2021). This policy allowed individuals to have a selection of vaccines and for fully vaccinated individuals to gather without masks (CDC, 2021c).

With many lives being lost to COVID-19, it appeared vaccination policy would be an answer to the challenges confronting society during the COVID-19 public health

emergency. April 2021, distribution of the Johnson & Johnson's Janssen vaccine ceased due to six reported cases of serious blood clots (CDC, 2021c). Ten days later, recommendations were issued by CDC and FDA to continue vaccine distribution (CDC, 2021c). However, hesitancy for COVID-19 vaccination remained strong in many communities amidst the emergence of more dominate strains. Thus, the U.S government waived the cost of vaccination to ease the financial burden on households. Without this waiver, vaccine would have cost between $25 and $50 per person (Amin et al., 2021). The CDC urged all to get one of the available vaccines and boosters if eligible (2021c). According to Largent and Miller (2021), it is our moral duty to get vaccinated to protect ourselves, others, and to do our part in mitigating the impact of the pandemic.

Table 2. Timelines for COVID-19 Policies and Protocols

Policies and Protocols	*Timeline*
• COVID-19 declared a global pandemic by WHO	March 2020
• COVID-19 declared a U.S. national emergency	March 2020
• No sail order was issued by CDC	March 2020
• Schools, restaurants and bars shut down	March 2020
• COVID-19 protocols became effective	March 2020
o Hand washing/ sanitizing	March 2020
o Social distancing	April 2020
o Mask mandate	
• Stay at home orders	June 2020
• Shutting down the economy	June 2020
• No sail order ended	October 2020
• Emergency use authorization for COVID-19 vaccine	December 2020
• Healthcare professionals and the aged prioritized for vaccination	December 2020
• Fully vaccinated people could gather indoors without a mask	March 2021
• Federal vaccine distribution websites became available	March 2021
• Vaccine distribution paused for Johnson & Johnson's Janssen	April 2021
• CDC urged everyone to get one of the three approved vaccines	October 2021
• Boosters recommended for fully vaccinated individuals.	November 2021

Sources: From Authors based on literature review

COVID-19 Pandemic—the Politics

The Table 3 reports on the issues that politicians disagreed on that likely affect COVID-19 vaccination. The Table shows that politicians disagreed that the high mortality is related to COVID-19, that the increased positive COVID-19 testing was a problem, or that there was a coronavirus at all (Hatcher, 2020). Similarly, political differences existed regarding support for institutions that supported response to pandemics. For example, the Obama administration established the National Security Council (NSC) Directorate for Global Health Security and Biodefense to monitor global health risks; however, the Trump administration dismantled it (Kahn, 2020). The Trump administration also eliminated the CDC epidemiologist's position responsible for ensuring accurate information during pandemics (Kahn, 2020).

As the COVID-19 pandemic unfolded, constituents received conflicting information concerning the disease from politicians and bureaucrats (Falkenbach & Greer, 2020; Hatcher,

2020; Luengo & García-Marín, 2020). In a crisis, there are often too much information for policymakers to digest, leaving policymakers to initially ignore the problem and any possible solution (Cairney, 2018; Hatcher, 2020). Although COVID-19 was an unusual event, many politicians and policymakers missed the opportunity to learn from evidence-based protocols established from past pandemics and recommendations for future public health crises (French & Raymond, 2009; Solinas-Saunders, 2020). Research suggests the accelerated spread of the virus could be traced through large gatherings and travelers who returned to their communities (Maragakis, 2020). Epidemiologist opinions were often contradicted by more powerful government officials, leaving people uncertain about the safety and viability of COVID-19 vaccinations (Schuchat & CDC COVID-19 Response Team, 2020).

Furthermore, there was stigma toward policy actions that resonated with the community (Sun et al., 2021; Ward & MacDonald, 2021). For instance, the mayor of Detroit, Michigan, declined an allotment of the Johnson & Johnson Janssen vaccine because of a perceived lower effective rate for preventing COVID-19 and symptoms (Setty, 2021). His position on the Johnson & Johnson Janssen vaccine not only influenced Detroit, Michigan, but it sent a message globally through media outlets that the Johnson & Johnson Janssen vaccine may indeed be harmful, causing fear and concerns about the safety of the vaccines.

Likewise, many politicians asserted that COVID-19 was a hoax meant to halt the political agenda and slow the growth of the economy (Kettl, 2020; Lovelace Jr., 2020; McConnell & Stark, 2021). Because politicians disagreed on the nature of the problem, there was little consensus on vaccination as a policy. As such, policymakers used both rational and irrational reasoning to guide their policy positions (Cairney, 2018; Cairney & Kwiatkowski, 2017). Consequently, although there has been both a Republican and a Democratic President in office since the start of the COVID-19, neither was successful in mandating COVID-19 vaccination.

In opposition to the national mood, President Biden issued Executive Order 14042 to "promote economy and efficiency in Federal procurement." The Executive Order required Federal Government contractors to provide "adequate" COVID-19 safeguards (The White House, 2021). On September 24, 2021, the Safer Federal Workforce (Task Force) explained protocols required by contractors and subcontractors of the Federal Government, which included adhering to COVID-19 protocols and mandatory vaccination for becoming or remaining a federal contractor after October 15, 2021 (The White House, 2021). However, an injunction in a Federal court in Georgia halted the enforcement of Executive Order 14042 on December 7, 2021 (Breuninger, 2022; The White House, 2021).

The COVID-19 pandemic highlighted the stark structural racism in BIPOC communities and contributed to partisanship among residents (Norris & Gonzalez, 2020; Dimitrijevska-Markoski & Nukpezah, 2023). Fueled by the pandemic, national protests for racial and social justice and influence on the U.S. election were key social issues (Norris & Gonzalez, 2020). There were disproportionate morbidity and mortality, increased work hazards, and inadequate access to technology among BIPOC (Fong & Hung, 2022). The transition to virtual learning "exacerbated the digital divide" and racial profiling against Asians for the "Chinese virus" were political issues stemming from the politics of COVID-19 (Fong & Hung, 2022, p. 198). These COVID-19 related political issues widened the disproportioned learning gap and stigmatized the Asian community, creating embarrassment for children with symptoms of COVID-19, resulting in not reporting, and increasing the likelihood of spread within the community (Fong & Hung, 2022). BIPOC need advocates to help them navigate focusing events.

Inequities in vaccinations occur predominately in households with lower income, education, employment, and affordable healthcare (Brearley et al., 2013; Norris & Gonzalez, 2020). Families with lower incomes have difficulty accessing healthcare (Chang et al., 2018). BIPOC are at greater risk of being infected by and dying from COVID-19 (Norris & Gonzalez, 2020). Due to other health concerns, there are groups that are unable to be vaccinated (WHO, 2020). Likewise, religious beliefs may prevent vaccinations. Although the location of residence may play a role in vaccination inequality, political will is perhaps the most critical barrier to social equity and to reducing morbidity and mortality (Brearley et al., 2013).

Table 3. The Politics of COVID-19

Politicians disagree that:
• the high mortality is related to COVID-19
• the increased positive COVID-19 testing is a problem
• there is a coronavirus at all
• institutions that support response to pandemics are necessary
• information shared with the public can be conflicting and political
• there is an unfavorable stigma toward some vaccines
• the research and evidence-based protocols established for past pandemics and traumatic events and recommendations could be used for COVID-19
• support for various racial groups, further politicizing the pandemic

Sources: From Authors based on literature review

Policy Entrepreneurs and the Advocacy for Vaccination During COVID-19 Pandemic

Policies that seem politically untimely or too radical are often resisted by interest groups when they believe the policy will harm their interests (King & Roberts, 1987). Policy windows for a particular policy is rare and unpredictable during crises like COVID-19 and coupling differs depending on the stream in which the policy window is opened (Herweg et al., 2018). Table 4 shows the various actors that played the role of policy entrepreneurs during the COVID-19 pandemic, the windows of opportunity they identified, and the strategies they used.

Policy Entrepreneurs that Emerged

As noted earlier, policy entrepreneurs could be individuals, government organizations, and non-government organizations. Table 4 shows that individual policy entrepreneurs who advocated for vaccination during the COVID-19 pandemic included elected and appointed officials, the scientific and healthcare community, business leaders, media representatives, and civic society leaders and politicians (Frisch Aviram et al., 2021; Montes-Martínez & Ramírez-Montoya, 2020; Udokanma et al., 2021). Government organizations included federal organizations such as FDA, CDC, U.S. Department of Health and Human Services, and the WHO (Centers for Disease Control and Prevention, 2021a; U.S. Department of Health & Human Services, 2021; U.S. Food & Drug Administration, 2020; World Health Organization, 2020a). On the other hand, Non-governmental organizations active as policy entrepreneurs comprised media houses, civic organizations, and educational institutions that aim to keep members and followers informed (Frisch Aviram et al., 2021; Montes-Martínez & Ramírez-Montoya, 2020).

The efficacy of groups such as bureaucrats, media houses, civic organizations, and educational institutions as policy entrepreneurs have been reported in scholarship. Frisch et

al. (2021) explored the behavior of street-level bureaucrats and the likelihood of them engaging in strategies that lead to policy change. The study found that the media is often engaged in policy entrepreneurship due to the span of its influence and access to political and social elites. The nexus of policy implementation, enforcement, and reform are impossible without civic organizations (Udokanma et al., 2021). The role of civic organizations is to have a strong stance for policy they favor and strongly oppose unpopular policies. The role of educational institutions as policy entrepreneurs cannot be understated, as they are responsible for equipping learners with human capital and entrepreneurial skills to act in a manner that achieve collective outcomes for society (Montes-Martínez & Ramírez-Montoya, 2020).

Windows of Opportunity Identified

Table 4 lists windows of opportunity that policy entrepreneurs recognized to advocate for policy change during the COVID-19 pandemic. The Table shows that windows of opportunity included, but are not limited to, availability of funding for vaccines and distribution, public information about the COVID-19 related events and administrative actions, scientific evidence on the efficacy of vaccines, executive policies that address public health concerns, strategies to build rapport and maintain public trust, government policies aimed to improve economies, and opportunity to engage with communities (Treisman, 2021). The federal government funded vaccine distribution during the first two years through the CARES Act. The timeline for this window of opportunity to close was unknown, a fact that could be used to encourage vaccination before the window closes. Policy entrepreneurs have better results when they are action-oriented because they are prepared for the unknowns. This is increasingly helpful when many alternatives and solutions are present.

Windows of opportunity may manifest as institutional strategies such as one coming from WHO. The organization held its first International Day of Epidemic Preparedness to advocate for prevention, preparedness, and partnership against epidemics, which drew attention to the difficulties of COVID-19 and the benefits of receiving the vaccination (WHO, 2020b). The CDC, an institutional policy entrepreneur, has continually posted on their website that the COVID-19 vaccines are "safe and effective" to re-focus the policy in the direction that offer solutions for decreasing morbidity and mortality related to COVID-19 (CDC, 2021f; van Rijswoud, 2011). Such information open windows of opportunity for policy entrepreneurs to capitalize on as they advanced their policy propositions.

The WHO and CDC activities served as policy windows that were utilized in advocating for mass vaccination. Across the nation, the media brought a large amount of attention to COVID-19. The media serves as a policy window by highlighting events that change the public's mood, and by praising or criticizing the actions of government officials seeking re-election. Using data from the media, individuals were able to quickly track the number of active cases, identify “hotspots”, track mortality rates, visually see patients in real-world trauma, gather information about vaccines' efficacy and eligibility (USAFacts, 2021).

Policy entrepreneurs seize opportunities for the adoption of favored policies (Kingdon, 2014). Policy entrepreneurs know that focusing events and indicators are also avenues for effective policy adoption (De Wals et al., 2019; Kingdon, 2014). Likewise, problems such as COVID-19 pandemic created windows of opportunity for policy entrepreneurs to argue COVID-19 problems in hopes of finding a solution, and providing proposals for policy adoption (Kingdon, 2014).

Table 4. Policy entrepreneurs, Windows of Opportunity and Strategies

Policy entrepreneur	Windows of opportunity	Strategies of policy entrepreneurs
Individuals • Elected and appointed officials • Scientist and Healthcare/ medical Professionals • Opinion Leaders and Business Leaders • Media personalities and Celebrities • Civil society leaders and Religious Leaders Governmental Organizations • U.S. Food and Drug Administration (FDA) • Centers for Disease Control and Prevention (CDC) • U.S. Department of Health and Human Services (HHS) • World Health Organization (WHO) Non-Governmental Organization • Media Houses (e.g., ABC, CBS, CNN, FOX). • Civil Society Organizations (e.g., charitable groups, religious groups) • Educational Institutions (e.g., Colleges and Universities)	• Government funding of vaccine development and distributions • Availability of developed and approved COVID-19 vaccines • Reported high rates of efficacy of vaccines developed: Pfizer 95%, Moderna 94%, Johnson & Johnson's Janssen 66%. • Availability of evidence-based research findings on COVID-19 vaccination. • Data such as more than 64% of the U.S. population is fully vaccinated. • Data such as states with higher vaccination rates report lower mortality, morbidity, and reopen their economies faster. • Vaccinations in the healthcare community increased in early 2021. • Increased number of policy entrepreneurs confirming their vaccination status. • Positive impact of vaccination on employment, more people returning to work. • Cumulative vaccinations in some developing nations such as Argentina (>73) and Brazil (>69) outperforming the U.S. (>64) for fully vaccinated persons per 100 people. • Data on differences among states with high versus low vaccination rates.	Policy entrepreneurs: • Receive vaccination on live television. • Interact with the nation and media to inform about the current actions and responses to focusing events (COVID-19). • Advocate for strong policies to address current public health concerns. • Build rapport, gain, and maintain the trust of constituents. • Create policies aimed to improve the economy. • Encourage vaccine participation. • Focus attention on positive impact of vaccination (e.g., mild symptoms after contracting the virus).

Sources: From Authors based on literature review

Strategies Policy Entrepreneurs Used

Strategies policy entrepreneurs used in advocating for COVID-19 vaccination are reported in Table 4. The Table shows that policy entrepreneurs use information, science, leadership, advice, crisis response, and resources to advocate for policies that stabilize their communities (Gofen et al., 2021; Kingdon, 2014; WHO, 2020a). Policy entrepreneurs devote their time and energy networking for policy alternatives that advance their policy positions (Cairney, 2018; Djordjevic, 2020; King & Roberts, 1987; Kingdon, 2014; Mintrom, 1997, 2019). Policy entrepreneurs seek to influence the policy process; they are on alert for opportunities that would favor their preferred policy positions (Arnold et al., 2017) in response to COVID-19.

One strategy used by policy entrepreneurs included the vaccination of individuals with power and influence in public settings with media coverage. The vaccination of

healthcare professionals and politicians in public was geared towards mass COVID-19 vaccination and to alter misconceptions about the vaccine and promote its safety (U.S. Department of Health & Human Services, 2021). Key policy entrepreneurs advocating mass vaccination included former presidents, a former vice-president, a vice-president-elect, senators, and chief medical advisor (Klein, 2020; Link, 2021; McConnell & Stark, 2021). These leadership roles made policy change likely (Mintrom, 2019; Sledge & Thomas, 2021). Personal concerns about vaccinations may change after seeing a loved one sick, hospitalized, or die from COVID-19. Testimonials from vaccinated persons who report mild symptoms often provided a window of opportunity and served as a strategy to increase vaccination (National Institutes of Health, 2020). Statistics from WHO and CDC on morbidity and mortality rates for vaccinated and unvaccinated individuals served as a strategy to advocate for COVID-19 vaccination (CDC, 2021g; WHO, 2022). Although policy entrepreneurs cannot force individuals to participate in unmandated policies, their strategies to encourage voluntary vaccination can be effective in increasing COVID-19 vaccinations rate in the population. And if vaccine distribution is deemed successful in slowing morbidity and mortality rates, then policy entrepreneurs are successful.

Conclusion

The present research examined policy entrepreneurs that emerged, windows of opportunity they identified, and what strategies they used to advocate for mass vaccination during the COVID-19 pandemic. Policy entrepreneurs have debated problems that occurred from the COVID-19 pandemic. Existing data confirm the problems with COVID-19 morbidity and mortality, especially among minority and vulnerable groups, which posed social equity challenges and were complicated by a hesitancy to receive vaccination in many U.S. communities (Brakefield et al., 2023; Gadson, 2020; Yusuf et al., 2022). The article reveals that in the policy stream, people are informed about the availability of vaccines, their effective rates, and that they are cost-free. However, the opposition to vaccination lies in the political stream. It is highly unlikely that a large group of individuals with different political views will share consensus on advocating for a policy to mandate COVID-19 vaccines in the U.S.

The article indicates that politicians, public figures, and governmental and non-governmental organizations played the role of policy entrepreneurs without perhaps, consciously knowing the full extent of their influence in advocating COVID-19 vaccination. To ensure that policy entrepreneurs are pushing for policies that create solutions, politicians and bureaucrats may work together to receive, learn, and disseminate information that accurately depict the events and the policy as identified in the article.

The article further reveals that policy entrepreneurs, regardless of whether they are politicians or bureaucrats, governmental or nongovernmental organizations, could be political actors that advocate for policies in diverse communities (Kingdon, 2014; Mintrom, 1997). Policy entrepreneurs' narratives compel others in their interpretation of focusing events. During the COVID-19 pandemic, policy entrepreneurs advocated for vaccination and ensured the most up-to-date public health guidelines available were communicated to the public. The article shows that policy entrepreneurs need information to produce narratives that encourage policy change (Kingdon, 2014). Existing scholarship suggest narratives about COVID-19 should be disseminated to constituents to illustrate the magnitude of the event and to gain the support of the proposed policy only after policy entrepreneurs reach a consensus on it (Kingdon, 2014; Mintrom, 1997). A misrepresentation of the narrative could lead to increased controversy and time constraints that impede the conjoining of the three streams. This article reveals that policy entrepreneurs see significant events such as evidence-based research

findings on COVID-19 vaccination as windows of opportunity. They then use strategies such as referencing the merits of vaccination, namely lower unemployment rates and better health outcomes in states with higher vaccination rates to encourage its acceptance.

The article has important policy implications for socially vulnerable groups. Of particular interest are the BIPOC communities, who are often underserved and require reorientation to policies and additional resources (Nukpezah & Soujaa, 2018; Nukpezah, 2020) to ensure equitable access to COVID-19 vaccinations (Brearley et al., 2013). Vaccination is considered a core component of improved health (Brearley et al., 2013). Yet, BIPOC communities are frequently unvaccinated or under-vaccinated even though this is where "vaccines could have the greatest impact" (Brearley et al., 2013, p. B104). The windows of opportunity and strategies employed by policy entrepreneurs could be used to good effect for policy advocacy among BIPOC communities.

Research also shows that vulnerable group most at risk of illness or death from COVID-19 should be the first to receive the vaccine (Torrie et al., 2021). While this is a safeguard if vaccine distribution is limited and ensures those groups who need it receive it first, public perception could preclude the decision to have the vaccine. Policy entrepreneurs are likely to succeed by targeting groups with a high likelihood of morbidity and mortality with their strategies. "A partnership approach to decision-making, employing strategies that promote consensus and social cohesion would also advance social justice" (Torrie et al., 2021, p. 930). Vaccines and vaccine education that target BIPOC communities, schools, and workplaces, promote social equity (Torrie et al., 2021). A concurring political will is required to petition for a mass vaccination policy and work toward social equity (Brearley et al., 2013). The present research shows that policy entrepreneurs are at the forefront in championing this outcome.

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