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Power, place, and access: Why history is at the center of black D.C. residents of wards 7 and 8 decisions to receive the COVID-19 vaccine



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ABSTRACT

Vaccines have played an essential role in curbing case and mortality rates due to SARS-CoV-2 in the United States. Still, many communities display high rates of unwillingness or inability to get a COVID-19 vaccine, limiting overall vaccination efforts and contributing to viral spread. Black Americans have expressed skepticism towards vaccines because of limited access to the technology, mistrust in its safety and efficacy, and a lack of confidence in the healthcare authorities that distribute it. This article investigates how Black residents of Wards 7 and 8 in Washington, D.C. thought about COVID-19 vaccination and why or why not they decided to vaccinate. These Wards' vaccination rates were markedly lower than those from Wards 1–6, which have substantially higher populations of White residents, affluence, access, and resources. This study involved 31 interviews with Ward 7 and 8 residents recruited through snowball sampling. We found that residents navigated the dual perceived risks of coronavirus infection and vaccination through three key frames: their relationship to their place or location, their desires to maintain autonomy over their health, and their abilities to access COVID-19 vaccines. This case study advances knowledge of vaccine utilization among marginalized communities, and how this phenomenon varies depending on local social, cultural, and political dynamics. Moreover, this research has implications for vaccine rollout efforts and the D.C. health system, as it reveals gaps in confidence and care that undermine health outcomes for Black residents.

1. Introduction

The extraordinary stress caused by the COVID-19 pandemic led to a new era of technical collaboration, culminating in three vaccines for the American public. While many celebrated this impressive feat, the vaccines' rapid development and dissemination timelines also caused concerns. Americans asked: how could someone create safe, effective vaccines so quickly? Can we trust this new technology and modern medicine? As Meghiani and Coffin (2021, March 9) documented, people wondered: what is in the vaccines, and can it be trusted? These concerns affected national vaccine rollout efforts, and COVID-19 vaccine uptake slowed in many communities across the United States (Muñana, 2020). This article presents the findings of a study about Black residents of Washington, D.C.'s Wards 7 and 8 and their willingness and ability to receive COVID-19 vaccines during the summer of 2021. In this manuscript, we explore how distrust and barriers to access undermine equitable health outcomes for Black D.C. residents. Some of these barriers may be reflected in other cities facing widening inequality around the world.

Medical anthropologist EJ Sobo (2021) argues that health is a means through which notions of inequality are often embodied and contested, as the body's "essential, fragile, and fickle" condition becomes a symbol

of complex and historical inequities (p. 56). The history of violence and neglect towards Ward 7 and 8 residents therefore cannot be dissociated from their health, the information they receive and interpret about health and healthcare, and how they feel and act toward vaccinations (Khubchandani & Macias, 2021, p. 2; Sobo, 2021, p. 56). Given the politically contentious nature of racial and ethnic disparities in COVID-19 morbidity and mortality and federal COVID-19 vaccine mandates, understanding low uptake rates is critical to advancing national health security and preparing for future pandemics and epidemics. Moreover, this research is vital to improving the well-being of structurally disadvantaged communities across America, such as those in Wards 7 and 8.

1.1. Background: vaccine hesitancy in historical context

While some vaccine concerns are unique to the circumstances surrounding the COVID-19 vaccine, others reflect patterns of distrust towards vaccine safety and efficacy that have existed across racial and ethnic groups since the 1800s; these worries persisted through new innovations, policy debates, health crises, and scandals, and contribute to suboptimal vaccination rates across the U.S. (Callender, 2016; Larson, 2020; Momplaisir et al., 2021). Vaccine skepticism and concern is a product of history and direct or indirect experiences that affect trust

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(Williamson & Bigman, 2018).

The first major American vaccine controversy occurred in 1902, when a Massachusetts resident sued his town over its smallpox vaccine mandate on the grounds that it undermined his self-determination (Williamson & Bigman, 2018). The lawsuit was appealed to the Supreme Court in 1905, where the Court ruled that states and localities could enact laws to protect their population's health (Williamson & Bigman, 2018). This case created some of the first national vaccination policies, drew public attention towards vaccination, and sparked debates around the introduction of subsequent vaccines (Williamson & Bigman, 2018).

As vaccines became normalized and subsequent scandals emerged, vaccine fears continued to grow (Larson, 2020). Perhaps one of the most significant controversies arose in the late 1990s, when physician Andrew Wakefield claimed that the measles, mumps, and rubella vaccine caused children to develop autism (Larson, 2020). Though his research was formally discredited, this rumor persists in anti-vaccine debates (Callendar, 2016; Gowda & Dempsey, 2013; Khubchandani et al., 2021). When the CDC reported increased measles vaccine refusal in 2013, almost 80% of objections occurred on the basis of ideological concerns—thus reflecting these scandals' impacts on the American consciousness (Callendar, 2016; Larson, 2020).

In the background, external ideologies and technologies fueled vaccine hesitancy's development. One prominent driver has been the increasingly neoliberal conception of health, which promotes skepticism in governance and places onus on citizens to “manage the self [...] and avoid calculable risk through informed decision-making” (REICH, 2014, p. 682). The internet and social media have also accelerated vaccine suspicions because these technologies can rapidly disseminate rumors, fears, or (mis)information (Larson, 2020). Algorithms that tailor online content augment vaccine concerns by trapping users in circles of misinformation (Larson, 2020), although some argue that these echo chambers are not real and differentially affect people (Garrett & Bond, 2021). Still, the 21st century presents a unique social and technological moment in which vaccine mistrust has a strong and growing presence across racial and ethnic groups (Larson, 2020).

1.2. Determinants of vaccine uptake for Black Americans

Beyond general concerns about vaccine efficacy and safety, Black Americans often link their unwillingness or inability to get a COVID-19 vaccine to anti-Black structural racism and state violence, or the use of state power to harm a group of people (Griffith et al., 2021a, 2021b). This hesitancy is also frequently linked to medical racism—such as unethical experimentation (i.e. the US Public Health Study of Untreated Syphilis in the Negro Male), neglect for medical issues that disproportionately face Black Americans (i.e. HIV/AIDS and diabetes), and discrimination from healthcare providers and institutions—that cause harm over many generations (Momplaisir et al., 2021; Nephew, 2021). As a response to systemic racism in healthcare, general mistrust or distrust in a specific provider can have logical, warranted, and deeply emotional roots that influence vaccination decisions (Anderson & Griffith, 2022; Griffith, Bergner, et al., 2021; Manning, 2020; Williamson & Bigman, 2018). For some, vaccine suspicion may therefore be conceptualized as a “protective response” (see Padamsee et al., 2022); it can also be a product of “cultural transmission” as community understandings of poor health system quality are passed between individuals (Benkert et al., 2019, p. 87; Bajaj & Stanford, 2021). Thus, outright stigmatization of vaccine hesitancy and “conspiracy theories” ignore the complex factors that limit vaccine uptake, particularly for Black Americans (Sobo & Drązkiewicz, 2021, p. 73).

Healthcare accessibility plays a critical role in vaccination decisions; both social and structural factors can impede vaccination and breed hesitancy (Feldman, 2021; Samuels, 2021; Sobo & Drązkiewicz, 2021). Research shows that financial, logistical, and informational barriers have undermined COVID response and vaccine uptake in Black communities (Callaghan et al., 2020; Feldman, 2021; Ndugga, Hill, Artiga, & Haldar,

2022, July 14; Samuels, 2021). For example, Americans without health insurance—of whom Black Americans comprise a disproportionate amount—fear additional costs to COVID-19 vaccination and care, which limits their willingness to seek both (Callaghan et al., 2020; Liu & Li, 2021; Ruiz & Bell, 2021).

Moreover, lack of affordable public transportation is often correlated with increased vaccine hesitancy (Bogart et al., 2021; Ndugga et al., 2022, July 14; Okoro et al., 2021). Ndugga et al. (2022, July 14) notes that COVID-19 vaccine sites are primarily located in pharmacies or chain-grocery stores; these institutions are limited in low-income neighborhoods or communities of color due to corporate profit concerns. Public transit to these stores may be costly or time-consuming, and even vaccine-seeking individuals may be deterred due to fears of being exposed to coronavirus during travel (Njoku et al., 2021).

Others who debate COVID-19 vaccination are discouraged by the costs of taking time off to care for themselves or others due to side effects (Fowers, 2021). This is a more common concern among Black Americans, and is magnified for individuals who chose certain versions of the vaccine that require multiple rounds of vaccination (Beckham et al., 2021; Fowers, 2021; Ndugga et al., 2022, July 14; Ortaliza, Krutika, Cox, Michaud, & Kates, 2022, April 21). Disproportionate concern about side effects and financial losses due to vaccination reflects how liminal people felt their survival was during the pandemic, and illustrates how systemic factors affect vaccine accessibility and hesitancy (Ortaliza et al., 2022).

Another reported uptake barrier is technology and information literacy (Njoku et al., 2021). The absence of quality broadband and internet-accessible devices undermines immunization rates, and Black Americans are less likely to access to this technology due to barriers such as high costs of purchasing a device (Press et al., 2021). Finding and registering for a vaccine appointment also requires technology literacy that many people lack, thereby impeding vaccine knowledge and uptake (Press et al., 2021). As Sobo and Drązkiewicz (2021) write, these barriers “[reflect] remaining access issues or [...] knowledge of structural factors that [undermine] the trustworthiness of portions of the health system (p. 2). Thus, vaccine trust and hesitancy is deeply tied to vaccine accessibility.

Medical anthropologist Heidi Larson (2020) notes that vaccine decisions are often framed by a community's history and politics (Larson, Leask, Aggett, Sevdalis, & Thomson, 2013) as dynamic “webs of daily life, embellished by culture, politics, personal experiences, beliefs, and histories [...] [cause] interpretation and reinterpretation” of one's perspectives, experiences, and surroundings (Larson, 2020, p. xxii). This ever-changing context can “[expose] layers of trust and distrust, hopes and fears, deep-seated beliefs, and risk perceptions” that affect both individuals' vaccine acceptance and create “crowds of shared emotions and belief” among communities that propagate vaccine hesitancy (Larson, 2020, p. xxxi). Larson argues that vaccine hesitancy is both constituted by and a response to local circumstances; therefore, understanding Ward 7 and 8 history is critical to examining their vaccine decisions.

1.3. Health and the history of wards 7 and 8

History shows that Black residents in Wards 7 and 8 have been systematically underserved by public institutions, healthcare authorities, and other non-Black D.C. residents—resulting in slow and poor-quality development, limited health services, and high levels of homelessness and violence (Bratman, 2011; King, Buckley, Maheshwari, & Griffith, 2022a; Mintz, 1989). As D.C. historians and scholars note, state violence towards Wards 7 and 8 continues today (King & Cloonan, 2020, May 27). Wards 7 and 8 hold the highest proportion of low-income Black residents the District (D.C. Health, 2021). D.C. Ward-income reveals extraordinary wealth gaps; the median household income in Ward 3 (a predominantly White, wealthy area) is \$190,000, while Ward 7 and 8 residents' median household income is \$50,000 (King & Cloonan, 2020, May 27). Furthermore, residents in Wards 7 and 8 have only one full-service hospital, two full-service grocery stores, limited public transportation,

and face higher rates of crime and drug use compared to all other DC wards that are better funded and resourced (Gualtieri, 2016; King et al., 2022; King & Cloonan, 2020, May 27; T. Brown, 2017; Smith, 2017).

Health disparities between Black and White residents serve as another marker of this state violence (King & Cloonan, 2020, May 27; T. Brown, 2017). Nationwide, Black Americans have been disproportionately affected by the pandemic due to structural barriers such as increased financial strain, limited healthcare access, and poorer health (Brown, 2020; Griffith, Holliday, et al., 2021; Poteat et al., 2020; Williams & Cooper, 2020; Yancy, 2020). For example, Black Americans are more likely to hold low-wage, “essential-worker” roles, which increases their risk of contracting coronavirus (Yearby & Mohapatra, 2020). These low-wage roles also limit care and COVID-19 intervention opportunities, as Black Americans are less likely to be able to afford personal protective equipment or COVID-19 therapies (Yearby & Mohapatra, 2020). Moreover, Black Americans face higher rates of diseases like hypertension, diabetes, and obesity due to structural issues of poverty, food deserts, and inequality (Griffith, Holliday, et al., 2021; Sirleaf, 2021; Williams & Cooper, 2020; Yancy, 2020). These same diseases magnify the severity of COVID-19, and thus increase the burden and death toll of COVID-19 for Black Americans (Brown, 2020; Griffith, Holliday, et al., 2021).

This pattern is reflected in the D.C., where Ward 7 and 8 residents face higher burdens of non-communicable diseases, as well as life expectancy gaps of roughly 15 years when compared to White residents in Northwest D.C. (King & Cloonan, 2020, May 27; King et al., 2022). At the same time, Ward 7 and 8 residents have significantly less access to care; only 5% of physicians in the District work in the two Wards (Meghjeni and Coffin, 2021). As a result, individuals seeking care in Wards 7 and 8 must visit small, local primary-care clinics such as Whitman-Walker, or travel to other Wards, which creates significant time, cost, and logistical burdens (Potter, 2019).

It is thus not surprising that Black residents of Washington, D.C., have been disproportionately impacted by the COVID-19 pandemic. According to 2021 U.S. Census Data, Black and White D.C. residents each comprise 46% of D.C.’s population (U.S. Census Bureau). Yet, in April 2022, Black residents comprised 48.1% of the District’s cases and over three-quarters of its death toll from coronavirus, establishing D.C. as the American state/territory with the largest race-case gap (D.C. Government, 2022; Meghjeni & Coffin, 2021, March 9). By contrast, White residents comprise less than a quarter of the D.C. case rate and less than 1% of the death rate (D.C. Government, 2022). 30.6% of all positive cases and 36.2% of deaths from coronavirus occur within Wards 7 and 8, both of which are over 90% Black (D.C. Government, 2022; D.C. Health, 2021).

Despite this disproportionate coronavirus burden, Black D.C. residents exhibit lower rates of COVID-19 vaccination than other racial identity groups. In April 2022, 97.2% of D.C. residents had been partially or fully vaccinated (D.C. Government, 2022). Only 59% of D.C.’s Black residents had been partially or fully vaccinated (D.C. Government, 2022). COVID-19 vaccination rates were even lower in Wards 7 and 8 (at 49.3% and 42.6%, respectively) (D.C. Government, 2022), than in Wards 1–6 (Fadulu & Brice, Saddler, 2021; Zhang & Bushey, 2021). By contrast, residents who identify as White and Asian/Pacific Islander had partial or full vaccination rates of 62% and 75%, respectively (D.C. Government, 2022).

Lack of vaccine accessibility in Wards 7 and 8 has played an important role in this dynamic (Bratman, 2011; Vaccines.gov, 2021). In October 2021, there were 100 different COVID-19 vaccination sites in D.C. (Vaccines.gov, 2021). However, only 12 of these were located in Wards 7 and 8 (D.C. Health 2021; Merchant, 2021; Vaccines.gov, 2021). Moreover, Ward 7 and 8 sites were clustered together, leaving large coverage gaps for the majority of residential neighborhoods (Vaccines.gov, 2021).

Beyond this, increased vaccine hesitancy has also contributed to the comparatively low uptake rates in Wards 7 and 8 (Meghjeni & Coffin, 2021, March 9; Ndugga et al., 2022, July 14; Press et al., 2021). Wards 7 and Ward 8’s vaccination rates suggest that a complex set of factors including race, class, and location may affect one’s COVID-19 vaccine

acceptance (Feldman, 2021; Merchant, 2021). The goal of this study was to explore how Black residents of Wards 7 and 8 thought about COVID-19 vaccination and why or why not they decided to vaccinate.

2. Methods

2.1. Participants and recruitment

This project involved open-ended qualitative interviews with 31 Black residents in Ward 7 and Ward 8 in Washington, D.C. during June and July in 2021. We recruited a convenience sample of Black-identifying residents of Wards 7 and 8 who were over 18 and could provide consent. No restrictions were established on the basis of an individual’s vaccination status. Both written and verbal consent were obtained from each participant in interviews. This study and all research materials were approved by the Georgetown University Institutional Review Board.

We recruited interview participants by posting on social media platforms such as Nextdoor and Facebook in community group pages (e.g. “Ward 7–8 News and Announcements” and “The Original Great Ward 8”). In the posts, the first author disclosed that she was a Georgetown student “conducting public opinion research” on coronavirus response efforts and COVID-19 vaccines, specifying that she was “hoping to hear the opinions of adult Black Ward 7 and 8 residents [...] in an informal interview over Zoom.” Contact was established by messaging individuals who engaged with social media postings. Participants were also sourced through snowball sampling whereby additional participants were recruited upon recommendation of study participants.

When initially recruiting participants, the first author received frustrated online comments from some Ward 7 and 8 residents who felt the project was invasive. Some expressed some fears that Georgetown University would be profiting off of “unethical” research. Given the long history of anti-Blackness in medical research, this was an understandable concern. After clarifying that these interviews were approved by the University’s Institutional Review Board, not monetized, and for an independent student project, study participants expressed more acceptance and interest. Although, some people decided not to participate in the interviews.

2.2. Study design

Each 30-75-min interview was conducted over Zoom. The interviews discussed participants’ background (demographics, including education and employment history), their experiences during the COVID-19 pandemic, their opinions on American political leadership, and the COVID-19 vaccines. Interview questions were open-ended, such as “Can you tell me about what it’s like to live in your neighborhood?” and, “What are your thoughts on the COVID-19 vaccine?” The questions, many of which were developed using Heidi Larson’s vaccine surveys, were designed to help elucidate the long-term and acute factors that affect vaccine confidence levels in Wards 7 and 8 (Larson, Jarrett, et al., 2015, pp. 4167–4168, 4171–4172). After each interview, the first author wrote field notes regarding the conversation, its major themes, and non-verbal signals from participants. These files were then shared and discussed with the second author.

2.3. Data analysis

The first author uploaded interview audio files to Otter.ai for a preliminary round of transcription. She revisited transcripts while listening to recordings to correct errors in the automated transcription. She subsequently created a codebook that she discussed in depth with the second author in order to identify relevant themes in the transcripts. The first author then engaged in preliminary coding to test the rigor of the codebook, which was reviewed by peers and developed with the second author, before coding the rest of the transcripts using the qualitative

coding software, Dedoose. This allowed the authors to determine which themes were most salient to participants. Thus, this research relied on thematic coding; field notes, transcriptions, and the codebook were continuously discussed, modified, and evaluated against one another (Bernard et al., 2016; Braun & Clarke, 2008, July 21).

All transcripts were coded by the first author. Codes were applied based on the clear definitions of each codes provided, and the second author discussed discrepancies with the first author about potential codes. We then evaluated how codes emerged across the transcripts, counting which codes emerged where and how frequently they were discussed. Then, the authors analyzed what each code conveyed, revisited the codebook to evaluate how codes aligned, and further clarified particular meanings within and between codes.

3. Results

Demographics are summarized in Table 1. Two in five study participants resided in Ward 7 (n = 13), while the remaining were from Ward 8 (n = 18). Of these participants, four in five participants identified as women (n = 25) and the remaining identified as men (n = 6). Most were between the ages of 31 and 40, with an average age of 45.3. Half were vaccinated and the other half were unvaccinated.

3.1. Major themes

In what follows, we discuss these codes based on major themes that emerged during research (Braun & Clarke, 2008, July 21). First was the concept of place: living in Wards 7 and 8 were central to why these residents refused vaccines. A major finding was that although people refused vaccines in those Wards, many ventured to other Wards to get vaccinated. Some of these interlocutors explained that, while the COVID-19 vaccine seemed effective, they did not trust that the vaccine they would receive in their neighborhoods would be the same-quality product as that of other neighborhoods. This suggests that government data may be skewed due to vaccine-seeking outside of areas in which many residents live and expect state violence. This also suggests that the current framing around vaccine hesitancy fails to consider a number of psychosocial determinants of vaccine uptake, acceptance, or resistance including personal experiences and the social, cultural, political, and historical factors that shape peoples' experiences. Second, we discuss the concept of relative power, through which people negotiated and perceived themselves in relation to the state and to vaccination campaigns specifically. Finally, our findings around vaccine-seeking discuss what the construct of accessibility means for Ward 7 and 8 residents.

Nine major themes emerged from the interviews with study participants (see Table 2). The three most frequently discussed topics among interviewees were government distrust, medical distrust, and vaccine safety. All participants expressed government distrust and concerns about vaccine safety. This indicates that these themes shaped residents' perspectives on government and its COVID-19 response, particularly as they relate to vaccination. Most participants also reported feelings of

Table 1
Ward 7 and 8 interview demographics.

Gender	N, %
Male	6 (19.4%)
Female	25 (80.6%)
Age (mean ± SD)	45.3 ± 12.99
Under 40	16 (51.6%)
Over 40	15 (48.4%)
Location	
Ward 7	13 (41.9%)
Ward 8	18 (58.1%)
Vaccination Status	
Vaccinated (Full or Partial)	15 (48.4%)
Unvaccinated	16 (51.6%)

Table 2
Interview parent code frequency.

Code and definition	Total times mentioned	Total unique individuals who mentioned (% , n)
<i>Government distrust</i> - belief that government and its associated bodies cannot or will not serve their interests, thus affecting uptake	176	100% (n = 31)
<i>Medical distrust</i> - belief that the medical system and associated individuals cannot or will not provide adequate care, thus affecting uptake	135	90.3% (n = 28)
<i>Vaccine Safety</i> - concern that the vaccine will cause negative health repercussions, affecting uptake	126	100% (n = 31)
<i>Perceived Barriers</i> - the perception of factors (whether actual or not) that prevent one from going to get vaccinated	43	61.3% (n = 19)
<i>Performed Complacency</i> - apathy or a lack of strong concern about COVID-19 or getting the vaccine	30	45.2% (n = 15)
<i>Vaccine Efficacy</i> - belief that the vaccine will not diminish the risks of COVID	23	48.4% (n = 15)

distrust in the medical system and healthcare authorities (90.3%, n = 28) which shaped their perspectives on whether or not they would choose to get vaccinated against COVID-19.

By contrast, topics such as vaccine efficacy or expressions of ambivalence towards COVID-19 or the vaccine received less discussion. Still, a significant proportion of interviewees mentioned both topics (see Table 2). The lower frequency of discussion coupled with a significant proportion of interview mentions suggests that these factors shape perspectives toward the pandemic and the vaccine, but that they may be less salient for participants.

Many residents conveyed strong feelings of “sadness, loss,” and “anger” about the pandemic, as well as deep “stress” over the ways that coronavirus had affected their daily lives. For some residents, these fears were a sufficient motivator for COVID-19 vaccination. But many others—even some who had been vaccinated—remained “suspicious” of the COVID-19 vaccines. In the pages that follow, we describe where these fears came from, what they mean, and how they work in everyday life, including how they prevent or facilitate vaccination.

Participants in this study explicitly acknowledged that vaccines could be effective, or that they could “work for other people.” Still, some residents said that they “just [didn't] know” about the COVID-19 vaccine and “worr[ie]d” about its side effects, particularly because of their race. This research is therefore consistent with other COVID-19 vaccine studies where Black Americans weave together identity, marginalization, and vaccine distrust in their vaccine refusals (Diamond et al., 2021; Momplaisir et al., 2021). When navigating vaccine decisions, residents were balancing competing concerns about the pandemic and immunization risks (Schow et al., 2021). This research suggest that three key factors helped participants weigh these fears and determine their coronavirus vaccination behavior: place, power, and accessibility.

3.2. Place, trust, and the perceptions of COVID-19 vaccination

“In all the black neighborhoods when you ask them which [vaccine] they have available, it's Moderna. Okay [...] But is there anything that we need to take in consideration?”

Place shaped Ward 7 and 8 residents' perceptions of the coronavirus vaccine and its rollout. For social scientists, place refers to not only a location, but also the social, cultural, political, and historical contexts that imbue a space with meaning (Cummins et al., 2007). The importance of place was evident in this research, as residents contextualized experiences that bred trust and vaccine hesitancy or acceptance through their

location in Wards 7 and 8. For example, because the local government had historically neglected their neighborhood requests—from issues as small as “*pothole repairs*” to large-scale inequities like “*not having groceries, [or] good hospital care*”—Ward 7 and 8 residents were “*suspicious*” of targeted city-led initiatives (Williams, newsletter, October 4, 2021), including neighborhood vaccination campaigns.

These results suggest a strong tie between place-based factors and health decision-making for Ward 7 and 8 residents. This link has been previously established in medical anthropology, because places can both “create and contain” health resources (Cummins et al., 2007, p. 1826). Furthermore, as places are created by social and group relationships, they are thereby imbued with complex social and political dynamics that influence the way people think about health (Cummins et al., 2007, 1828). Previous vaccine confidence research addresses the importance of place in vaccination decisions, but focuses on uneven distributions of resources and geographic barriers that undermine vaccine uptake (Dubé et al., 2014, Ndugga et al., 2022, July 14). While COVID-19 vaccine accessibility plays an important role in Wards 7 and 8, this research builds upon existing studies to examine how trust and perceptions of vaccine quality can be imbedded in one's sense of place. Our findings also highlight the subtle but critical distinctions between distrust, mistrust, and trustworthiness (Anderson & Griffith, 2022; Griffith et al., 2021).

Mistrust in government and vaccination was bound to the personal experiences of communities in Wards 7 and 8 over their lifecourse, though not necessarily to specific events in people's lives (Griffith, et al., 2021). While some participants briefly attributed their concerns to a history of geographic marginalization—as “*the people stuck over the bridge [from D.C.]*”—as well as the legacy of systemic anti-Blackness, most people linked their hesitancy to recent, Ward-specific frustrations. These discussions centered on the lack of public services in the area, the high levels of crime and violence, and suspicions about gentrification. Therefore, it was not only historical precedence but also “*stress every day*” that impeded trust in government (Crooks et al., 2021; Sirleaf, 2021; Washington D.C. Government, 1860).

Moreover, perspectives on vaccination were tied to systemic racism (see DeFiguero, Simas, Karafillakis, Paterson, & Larson, 2020; Kricorian & Turner, 2021; Lazarus et al., 2021; Moore et al., 2021), and notions of mistrust that are rooted in the historical context. Residents said these present-day issues indicated that they should not trust a government-promoted vaccine:

The only reason why [the government] care[s] about us now is because COVID is worldwide and the spotlight is on [them] to do something about it. But once COVID is gone, that's when [the government doesn't] really care about us.

[...] Don't come talking to us about the vaccine [...] We don't care. We want to feel like you care about us as a people.”

Moreover, residents perceived the local government's focus on improving vaccination rates as a “*cover up*” or thinly-veiled form of extraction, which was frustrating when other community needs were not being met. This concern echoes national studies of vaccine refusal among Black communities (Batchlor, 2021; Bogart et al., 2021). Black residents' beliefs that white D.C. residents might be getting different vaccine—indicating that vaccines provided in Wards 7 and 8 might be “*something else*” that was “*watered-down*” or less safe—revealed their deep-seated mistrust of government, as well as their beliefs of deceit as an everyday practice of anti-Blackness. Some of our study participants said that they would be more willing to get vaccinated in a “*whiter*” D.C. neighborhood, but few of them had the time to do so. Thus, Black Ward 7 and 8 residents' concerns were tied to experiences of community disenfranchisement (King, Buckley, Maheshwari, & Griffith, 2022a), which illustrates the role that place can play in shaping perceptions of safety, social security, and vaccine uptake.

Notably, our findings suggest that the physical space of disenfranchisement, rooted in historical practices of inequality, may be what

people distress in Wards 7 and 8 instead of the vaccine itself (Good, 1993; Schow et al., 2021). We found that some vaccine-hesitant Black residents do trust coronavirus vaccine technology and innovation process. As one resident reported, “*a lot of the people I'm around [at work in Ward 3] are the upper echelon of power [...] So [the government is] probably [...] not gonna mess them up. And so I felt safer doing it [in Ward 3]. But if it offered like, yeah, just in my neighborhood or something, I wouldn't have taken it.*” Still, others remained skeptical of their neighborhood's vaccine distribution because of systemic anti-Blackness in the area. This finding corresponds with regional studies by the CommuniVax Coalition—a national group of social scientists who research COVID-19 vaccine uptake—where Black Americans across the U.S. reported concerns about receiving an “*unsafe*” COVID-19 vaccine in their majority-Black communities (Doost, 2021). As geographer Steven Cummins (2007) notes, these findings indicate that instances of “*targeted*” outreach cannot be disentangled from past government transgressions in the same place.

Some of Ward 7 and 8 residents' place-based mistrust was imbued with concerns about a “*lack of resources*,” “*gentrification*,” and the pressing need for “*accessible, quality healthcare*”. Both Wards suffer from a scarcity of hospitals and specialty services (Bratman, 2011; King et al., 2022a; Merchant, 2021; Ndugga et al., 2022, July 14), and many residents reported strains in patient-physician relationships. Experiences with physician neglect, where doctors were “*rushed*” or “*rude ... not listening*”, were the starting points for participants who then explained their distrust in the medical system that had done little to quell concerns about their trustworthiness that are rooted in historical mistrust. This distrust was directed towards hospitals, clinics, public health officials, and pharmaceutical and insurance companies (also see Savoia et al., 2021a; Szilagyi et al., 2021). Moreover, residents frequently tied these concerns to their racial identities and low-income statuses.

Many scholars argue that medical mistrust among Black Americans can be traced to historical events such as the US Public Health Service Study of Untreated Syphilis in the Negro Male (Manning, 2020; Ndugga, Hill, Artiga, & Haldar, 2022, July 14). Despite some residents' references to the long history of medical apartheid, few participants explicitly mentioned these unique instances as the cause medical and vaccine distrust. Instead, this skepticism came from individuals' routinely “*negative*” experiences with care-seeking in Wards 7 and 8. Indeed, “*mistreatment*” in the medical system persuaded many residents to “*travel*” to other parts of the District for higher quality care, emphasizing how these local and routine instances of racism embed mistrust in the community (CommuniVax Coalition, 2021). Our research suggests that overemphasis on discrete narratives of distrust ignores ongoing instances of state and medical violence within Black neighborhoods that are fundamental to vaccine decisions (CommuniVax Coalition, 2021; Cummins et al., 2007; Ndugga et al., 2022, July 14), and the critical importance of distinguishing people's distinct experiences that lead to distrust from the larger context of structural racism that breeds mistrust. Furthermore, this study illustrates how routinized grievances become essential to how people perceive the state (CommuniVax Coalition, 2021; Manning, 2020), which reinforce concerns about the trustworthiness of the state to provide optimal care and services to all.

3.3. Power and politics that shaped vaccine decision-making

“*We've been taught by experience not to trust [the local government], as it's very far and few between where we've seen people who want to help us, genuinely.*”

In this study, participants emphasized that their community's interests were in opposition to or neglected by government and medical officials. Residents grappled for power and “*autonomy*”, suggesting that “*especially in our neighborhoods, we have to fight for everything that we want to have or keep*” (Shoenfeld, 2019). Importantly, they wanted their voices to be heard and to improve their communities.

Historically, grassroots organizing has helped shape Ward 7 and 8

developments in the face of state violence and neglect (Shoenfeld, 2019). This emphasis on community power was reflected in residents' coronavirus vaccine decision-making (Charles, 2021; Iton et al., 2022; Sobo, 2016). Vaccinated participants explained that they devoted hours to "independently research[ing] and com[ing] to [their] own conclusions" about COVID-19 vaccine safety and efficacy prior to receiving the vaccine. They noted that personal investigation and self-determination in health was "important," and empowering. This process of research and cross-referencing allowed some to feel "more comfortable" receiving the COVID-19 vaccine, even if they distrusted the government and the medical system.

By contrast, unvaccinated respondents expressed feelings of powerlessness, and were concerned that local government and medical officials were pressuring them to receive the vaccine. Residents critiqued the local government's use of vaccination incentives (such as gift cards and raffles), viewing these "bribery" attempts with high suspicion. To participants, the incentives indicated that the vaccines were "unsafe," and that residents were "lab rats" or "guinea pigs" for a dangerous medical technology. Moreover, participants conveyed that these tactics were both unethical and concerning infringements on their autonomy. These residents firmly defended their decisions to delay or refuse vaccination, invoking language such as "my body my choice." In this way, participants viewed vaccination campaigns as attempts to distort decision-making and remove individuals' power.

Many scholars have argued that, in face of policies, norms, or authorities that impose public health guidelines, vaccine hesitancy is a mechanism through which individuals attempt to reassert agency and control (REICH, 2014; Sobo, 2016). Scholar Jennifer Reich's study (2014) on white mothers' vaccine refusal found that rejection was deeply tied to mothers' concerns about the imposition of external healthcare guidelines. Matters believed that knowledge about their children should be prioritized above government health mandates (REICH, 2014). White mothers in Reich's study used their refusal to regain power in their communities, and argued that individuals were responsible for seeking their personal 'best' care options (REICH, 2014). Ultimately, Reich posits, this decision-making reflected white mothers' privileges as educated, upper-class individuals with knowledge of both policy and the healthcare system. These social advantages allowed mothers to legitimize their anti-vaccination decisions and gain social power through "good mothering" (REICH, 2014, p. 699).

Similarly, Black Ward 7 and 8 residents who avoided the COVID-19 vaccine acknowledged that vaccination might "work" for some people, but maintained their refusal because of "personal choice[s]" in the best interest of their "safety" (emphasizing their mistrust of the vaccine delivered in their immediate neighborhood). Scholars writing on vaccine hesitancy in Black communities argue that this vaccine refusal can also be an authority-building mechanism, albeit distinct from that of white mothers (Brunson, 2013; Sobo, 2016; Szilagyi et al., 2021). Nicole Charles (2021) argues that Black individuals' vaccination refusals may not be positive attempts at building power, but rather reactionary efforts to reclaim agency in the face of capitalist, racist systems. In other words, our interlocutors' critiques of government intervention may not be critiques of overreach but rather of violence. Their resistance may not be about social power, but rather an expression of their "an aspirational vision of citizenship based on political rights, social recognition, and access to high-quality public services delivered by a robust, responsible state" (Chigudu, 2019, p. 415). Thus, residents' attempts to preserve and reclaim social power in the face of coronavirus fears could drive them to be increasingly vaccine hesitant.

3.4. Vaccine accessibility

"I could get vaccinated at the Safeway or Giant [...] but they're far, they're on opposite ends [of the Ward]."

Many study participants perceived coronavirus vaccination sites as

"difficult" to access. Participants noted that they were "not sure where they could get vaccinated," and believed that it would be difficult to find sites in their neighborhoods due to "internet access issues," "transportation problems," or "lack of grocery stores or pharmacies" where vaccines would be distributed. Other studies in minoritized communities document these same information barriers to vaccine uptake (CommuniVax Coalition, 2021, Ndugga et al., 2022, July 14). Even more, many perceived vaccination and recovery would take "time that [they] can't set aside" or said that they were "dealing with [their] job[s]," indicating that the loss of income from vaccination would be too costly. Broadly, these same barriers have prevented vaccine-seeking in Wards 7 and 8 and around the country (Beckham et al., 2021; Fowers, 2021; Kaiser Family Foundation, 2021; Liu & Li, 2021; Ruiz & Bell, 2021). This finding reflects the financial precarity that many Ward 7 and 8 residents face, as well as how central this insecurity was to their vaccination hesitancy. Our findings highlight that accessibility cannot be disentangled from discussions of racism and inequality. Furthermore, they suggest that vaccine hesitancy cannot be understood simply as a "trust issue", because this framing places disproportionate onus on individuals who are significantly impacted by accessibility barriers (Njoku et al., 2021; Sobo & Drajčewicz, 2021). Thus, this study illustrates how vaccine refusals can be inherently systemic, and how a lack of knowledge or understanding may stem from these same roots.

3.5. Limitations

This study has important limitations. The interviews reveal themes, beliefs, and experiences with the COVID-19 vaccine, and should be understood as exploratory. Moreover, the data reflect a unique social and political moment from June and July in 2021, and may therefore differ from current perspectives on coronavirus and vaccination. Since the conclusion of the research process, developments such as the rise of coronavirus variants, the distribution of coronavirus boosters, and policy changes including travel bans and vaccine mandates have affected vaccination in the United States (Ellyat, 2021; Krause et al., 2021; Ndugga, Hill, Artiga, & Haldar, 2022, July 14). Our results should be interpreted within the context of these months in 2021, and future studies should consider longer and more frequent data collection to understand how perspectives change over time. Moreover, the first author who conducted the interviews was not a Black resident of Ward 7 or 8, which may have affected how and what study participants discussed.

4. Conclusion

Our findings suggest that Ward 7 and 8 vaccine hesitancies are not necessarily about the technology at all. Rather, we found that these residents were more concerned with systemic injustices, including the quality of technologies being distributed within the majority-Black communities in Wards 7 and 8. In material ways, these Wards are siphoned off from the rest of D.C. and have long received fewer financial, social, and institutional investments, including COVID-19 response interventions (Bratman, 2011; Vaccines.gov, 2021).

The coronavirus pandemic continues to devastate the United States, with national death tolls reaching 1,012,816 as of July 19, 2022, over a year after COVID-19 vaccines began being distributed to the American public (WHO Coronavirus Dashboard 2021). This benchmark serves as a painful reminder of COVID-19 vaccines' underutilized potential. Indeed, a recent study by the Peterson Center on Healthcare and the Kaiser Family Foundation (2021) suggests that up to 163,000 of these lost lives could have been prevented if individuals had received the vaccine (Ortaliza et al., 2022).

Dynamics that affect vaccination uptake must be examined at a more granular level, and from the perspective of the people who are being asked to engage in behaviors like vaccination. Low vaccine uptake poses a threat to the safety and security of individuals and their communities. Moreover, in areas facing high levels of inequity, low vaccination rates

can play a role in replicating inequalities between the most advantaged and most vulnerable—which is demonstrated in part by lack of access to vaccine clinics throughout D.C. and the fear that Ward 7 and 8 residents' vaccines are contaminated (Brown, 2021; Schow et al., 2021). But to some, the risks of vaccination and disease pose equally concerning threats (Brown, 2021; Schow et al., 2021). As this study shows, there is a complex and evolving set of factors that affect willingness to receive the COVID-19 vaccine in America.

This research highlights the unique ways that these factors play out Wards 7 and 8, where local culture, politics, and histories of violence are tied to Black residents' understandings of risk, vaccine accessibility, and willingness to be vaccinated against COVID-19. This has important implications for coronavirus response efforts, as well as conversations about vaccine hesitancy among Black Americans. Identifying specific determinants of vaccination behavior in D.C. illustrates that common vaccine hesitancy discourse about Black communities lacks nuance and context. Black Americans' lower rates of vaccination cannot solely be attributed to the "Tuskegee Syphilis Experiment" or Henrietta Lacks. Perpetuating these simplistic and monolithic narratives of distrust both flattens Black D.C. residents' experiences and limits potential for transformative health reforms. It may be that providing better access to vaccinations outside of Wards 7 and 8, in contexts that people identify as trustworthy, could improve vaccine uptake. Recognizing that people perceive better product outside of their neighborhoods because of state violence can advance programmatic intervention. This requires programs to evaluate vaccine distribution by asking where people reside, rather than solely tracking the Ward in which the technology is distributed. This could create a more accurate account of who is seeking vaccines and where, which can inform which clinics need to be better stocked and where to advertise for that clinic.

Low vaccination rates in Wards 7 and 8 are both a symptom of and a contributor to broader inequalities between Black and White D.C. residents. This skepticism is built on a history of anti-Black structural racism and state violence in the U.S., and the D.C. government's continuous failures to provide adequate services across the Anacostia River. By placing this study within broader conversations about anti-Black state violence and examining how it continue to affect these communities, a clearer meaning of vaccine hesitancy can be understood.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests:

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