Information Seeking Behavior Among Black Adults in Detroit in regard to COVID-19

By

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Abstract

In this study we researched the information seeking behavior among Black adults in Detroit in regard to COVID-19. This population was of particular interest because Black people represent less than 13% of the population of Michigan but represent nearly 20% of total deaths from COVID. As Detroit is the Blackest city in America by percentage, insights gathered from this demographic could prove invaluable. In this study we conducted 13 semi-structured qualitative interviews of Black adult Detroit residents.The following findings were compelling and salient among the participants: like other groups, Black Americans appear to sift through a large amount of COVID-related information using sophisticated thought processes to come to their own conclusions. They demonstrate several tendencies when doing this that are less commonly seen in the White majority, such as using big national events as evidence of what is real; harboring some baseline skepticism about information delivered by broadcast news sources; incorporating background knowledge from their upbringing and the history of medical malpractice and experimentation on Black Americans; accepting the reality of the pandemic (or not) through the experience of people around them; and placing much greater trust in information delivered by Black individuals, both within their circle of acquaintances and in the media, and trusted information less when delivered by White people.

Introduction

The COVID-19 pandemic has disproportionately affected historically excluded minorities in the United States of America, particularly Black people. African-Americans had a four times higher risk of getting hospitalized and 2.8 times higher risk of mortality, they were also more likely to lose their job and insurance through work, which decreased their access to healthcare facilities (CDC)(Mondal et al).

Social determinants of health (SDOH) put Black people at greater risk for comorbidities which increase their odds of being infected with COVID-19 and lower their odds of surviving COVID-19. “Social determinants of health include factors like socioeconomic status, Internet access, education, neighborhood and physical environment, employment, and social support networks, as well as access to health care.Racism and perceived discrimination also fit the description, in 2019, 35.6% of homes in Detroit did not have access to broadband Internet, and studies show 21-42 million homes across the nation may not have Internet access as well contributing to the digital divide in the United States(Joyce)(Vogels). The digital divide has been described as a “disconnect” between those who have access to computers and the internet and those who do not” However, it is not quite so simple because the digital divide is often a predictor of socioeconomic status, educational attainment, and other social determinants of health.

Addressing SDOH is important for improving health and reducing longstanding disparities in health and health care. SDOH also affects health literacy and information seeking behaviors. Health Literacy is, “the degree to which individuals can obtain, process, and understand basic health information and services needed to make appropriate health decisions” (CDC). Health literacy is more than general literacy in that it includes the abilities of information seeking, critical information analysis, and decision making. According to the Social Ecological Model of health literacy, health literacy is influenced by external factors in the physical and social environment such as individual, interpersonal, organizational, community, and policy factors . This model facilitates the understanding of disparity in health literacy.”

Prior research has shown that Black people have greater deficiencies in information as it relates to health literacy, and the daily stressors of life may affect pursuit of information. This study explores the information seeking behavior among Black adults in Detroit, Michigan in regard to COVID-19. Detroit, Michigan has the highest percentage of Black people in any city in the United States, at over 77%. However, Michigan overall has a Black population of just 13%. Yet Black people account for more than 19% of overall deaths in the state. In taking a closer look at Wayne county, wherein Detroit is contained, Black people account for 4,781 deaths per 1 million people compared to 3,350 deaths per 1 million White people.

In this study we conducted semi-structured qualitative interviews with Black Detroit residents. The only requirements for eligibility and participation were being a Black adult, aged 18 or older, who was living in Detroit at some point during the pandemic. The sample included individuals with education ranging from a High School Diploma to the graduate degree level. Individual income ranged from unemployed to $150,000 per year. The final tally of participants included 9 females and 4 males between the ages of 20-73 years old.

The following findings were compelling and salient among the participants. Like other groups, Black Americans appear to sift through a large amount of COVID-related information using sophisticated thought processes to come to their own conclusions. They demonstrate several tendencies when doing this that are less commonly seen in the White majority, such as using big national events as evidence of what is real; harboring some baseline skepticism about information delivered by broadcast news sources; incorporating background knowledge from their upbringing and the history of medical malpractice and experimentation on Black Americans; accepting the reality of the pandemic (or not) through the experience of people around them; and placing much greater trust in information delivered by Black individuals both within their circle of acquaintances and in the media.

Literature Review

There have been many studies that seek to highlight what key factors play the most critical role in information seeking behavior in minority populations during times of crisis, particularly in the Black community. It is well established in public health research that due to SDOH like: income level, education status, employment opportunities, food insecurity, gender inequity, etc. greatly affect Black populations. Black populations in this country are at a greater risk than other populations to experience greater harm during public health crises like the COVID-19 pandemic (Mondal et al, Reisdorf et al). Bearing this in mind, interventions which positively affect the information seeking behavior, information retention, and overall health literacy of Black populations would be invaluable in chipping away at the disparities that we continue to witness.

Overall Information Seeking

Information Seeking under COVID

To organize our research, we laid out prior research into four primary categories: 1) socioeconomic status (SES) and associated stressors and vulnerabilities which affected information access and engagement; 2)political leaning affected perceived credibility; 3)great reliance on social media and word of mouth; and 4) news sources, public sources and search engines.

SES and the Associated Stressors and Vulnerabilities which affected Information Access and Engagement

Prior research has uncovered that SES essentially lays the foundation for information seeking behavior. Those with a high SES compared to those with a low SES generally find themselves on the informed or misinformed ends of the information spectrum respectively. Stress, anxiety, depression, and Post-Traumatic Stress Disorder (PTSD) symptoms were high- potentially triggering a lack of engagement with information related to COVID (Zhu et al, Mondal et al, Brunson et al, Neely et al). This signifies if you had more resources for information finding, then you used more types of sources, and got more information correct (Lopez et al, Mondal et al, Reisdorf et al).

Americans who had a higher SES had more time and resources to seek out information about COVID, and they also experienced less stress related to COVID (Reisdorf et al, Mondal et al). Those with lower SES experienced more stress as it relates to, “lack of social interaction, job loss, financial difficulties, and concern for vulnerable family members” (Mondal et al). The issues that COVID created were common among most people, but the ability to handle them financially is what made the difference in stress levels, and consequently engagement. Americans with a low SES were so stressed that prior research indicates that it led to something called ‘COVID-19

fatigue' or COVID-19 burnout (Zhu et al, Mondal et al, Brunson et al, Neely et al). People were tired of hearing about COVID because in many ways they felt powerless to adequately fight against it. Additionally, it would appear as though many Americans adopted an adjusted version of Maslow's Hierarchy, a framework designed to rank human need on the path to self-actualization, to the pandemic. COVID exacerbated the porous financial situation of already vulnerable individuals to the point that their well-being and livelihood were being deteriorated not by the threat of COVID to their health only, but to their jobs, housing security, food security, etc (Mondal et al, Brunson et al).

It is also highly probable that the digital divide contributed to a lack of information access as a consequence of low SES. The Federal Communications Commission estimates that 21 million people in the United States don't have reliable Internet access. 43% of adults on lower incomes do not have home Internet access and 41% do not have a desktop or laptop computer(Vogels). This lack of access makes seeking out information much more difficult for a population which already faces significant barriers in regard to most of life's essentials.

Political Leaning Affected Perceived Credibility

Those who primarily viewed conservative news media and or engaged in more checking actions, got less information correct compared to those who used more mainstream or 'neutral sources', political leaning affected which sources Americans found credible and trustworthy as well and this was true regardless of SES(Reisdorf et al, Calvillo et al).

Additionally, those who were politically conservative were more likely to assume they had "less personal vulnerability to the virus and the virus's severity as lower, and stronger endorsement of the beliefs that the media had exaggerated the virus's impact and that the spread of the virus was a conspiracy"(Calvillo et al). Conservatism also predicted less accurate discernment between real and fake COVID-19 headlines and fewer accurate responses to COVID-19 knowledge questions" (Calvillo et al). The pandemic in the United States was politicized from the very beginning, from the fanning of the flames of xenophobia as it relates to former President Trump calling COVID-19 the "China-virus", to conservative media news outlets spreading misformation about mask wearing, and social distancing, and the overall downplay of the seriousness of the virus. However, Republicans who used former President Trump as their primary source of information were more likely than the average convservative to believe the pandemic was overblown (Jurkowitz & Mitchell). More than one-third of Americans support COVID misinformation and conservative Americans are more than twice as likely to support or believe COVID-related misinformation (Motta, et al). The political landscape in the United States can be considered archaic and tribal in the way party loyalty is championed above reason and facts. Earlier on in the pandemic there was a sharp increase in less credible information sources (Reisdorf et al Damian & Gallo). Initially this was likely due to a lack of health literacy among the general U.S. population and the novelty of COVID, however it was certainly exacerbated by

conservative news media outlets. At one point during the pandemic, 19.2% of Americans thought COVID was man-made or part of some larger unknown and nefarious plot (Boot et al).

Reliance on Social Media

Prior research reports that over 76% of Americans relied on social media at least “a little” during the COVID-19 pandemic, and rarely fact checked what they found despite being aware of the rampant misinformation occurring on social media collectively (Neely et al). Social media likely served as an information source for those of lower SES, as they were likely somewhere in the chasm of the digital divide. While those of a lower SESwho are affected by the digital divide do not usually possess a desktop or laptop computer, they usually possess some sort of smartphone, with 85% of adult Americans saying they own a smartphone, which allows for access to social media (Reisdorf et al, Perrin) . Although social media carries great risk for misinformation it is highly accessible, even accounting for things like the digital divide and lower SES. Like standard televised news media outlets, social media is also a highly politicized and partisan medium for information. Therefore, those who follow conservative social media outlets and accounts are vulnerable to misinformation as well, however those who followed scientific and/or credible social media accounts were more likely to be vaccinated as compared to those who did not (Neely et al).

As reported by previous research (Neely et al), word of mouth is perhaps the most salient way that information is learned and exchanged as it relates to people. While word of mouth was not the primary source of information for most Americans, word of mouth was the most used type of information gathering and exchange method (Neely et al). More Americans used word of mouth via social media, digitally, or in-person, than spoke to a doctor about COVID during the pandemic. COVID burnout likely contributed to this phenomenon, as many Americans reported that they stopped seeking out information about COVID, however the information still passively found its way to them via interpersonal communications with family and friends, etc.

Public News Sources & Search Engines

News and information from public sources like the Centers for Disease Control (CDC), and World Health Organization (WHO) increased acutely early on in the pandemic (Mitchel et al, Reisdorf et al, Kricorian et al, Mangono et al, Bento, et al), this is likely due to the overall novelty of COVID at the time. Despite political affiliations and leanings, and before Americans began to settle into their entrenched viewpoints about COVID-19, the CDC and WHO were the sources of truth. Google searches for things like “COVID-19” and “coronavirus” also increased dramatically and high search volumes for words like “unemployment” actually served to predict spikes in unemployment claims across the country (Kricorian et al, Mangano et al). This information suggests that the time to truly instill in people the seriousness of an issue is at the beginning of a crisis. However, this is difficult when the issue, crisis, or pandemic, is even novel to the

experts. Once Americans' views are politicized by all the information, news outlets, and conversations they are exposed to, their views will not likely change. This is evident in the fact that by the end of 2020 mistrust in the government increased among all racial and ethnic groups (Kricorian et al).

Information Seeking Among Black Americans

Several major themes regarding the information seeking behaviors of Black Americans are present in existing literature: expertise and race, misinformation, a distrust for government and medical science, and spirituality.

Expertise & Race

Expertise and the credibility of the source was found to be a highly compelling factor in increasing the information seeking incidence of Black Americans, overall knowledge, and knowledge of preventative behaviors as it relates to protecting ones' self from COVID-19 (Alsan et al, Torres et al). Additionally, when the doctor and the participant were Black, information seeking behaviors increased more compared to the other groups (Alsan et al). This is consistent with other research (Huerto) that shows Black patients actually have better outcomes with Black doctors as compared with White doctors. These findings in concert suggest that a Black doctor provides an additional comfort, trust, and peace of mind to Black patients as compared to White doctors, which allows for a greater dialogue and more information seeking. Furthermore, although expertise in the Black community is important, the history of medical experimentation and other unethical practices on Black people at the hands of the United States government has likely resulted in the greatest comfort for Black Americans coming from a physician who is also Black. However, Black Americans with chronic illness were much more amenable overall to the information coming from most sources that appeared credible due to their increased vulnerability to COVID-19 (Roberts et al).

Misinformation

Prior research has additionally found that Black people are more likely to get more information about COVID-19 wrong compared to other racial and ethnic groups, even though they engaged in more fact checking than other groups (Reisdorf et al, Jones et al, Mondal et al). Black people in the United States generally have a lower SES than most other groups, and the quality and amount of information that is available to a given individual is closely linked to their SES (Mondal et al). Therefore, it is consistent with prior research that Black people have less

accurate information about COVID because they have less time, resources and ability to pursue accurate information. Health literacy is also low among Black Americans. Therefore, the ability to discern what information is credible and what information is not may not be a skill in the arsenal of many Black Americans. This is again related to low SES and the digital divide, which then guides Americans toward social media where misinformation is rampant. Although Black Americans do more fact checking than other groups, Black people still have less accurate information which is also likely due to low health literacy levels. Populations with low SES have less time to thoroughly consider the veracity of a news source, instead they tend to skim and rely on how consistently that information was reported across a wide range of sources as a means of fact checking. The viewing of local news sources resulted from habit more so than information seeking (Reisdorf et al). As a result of the lack of time for information finding among the Black population, word of mouth is an especially salient theme (Neely et al). With Covid burnout high among the Black population, information likely circulated throughout the Black community passively yet prevalently lending to high amounts of information and misinformation.

Distrust for the Government & Medical Science

From the days of experimentation on Black slaves in America, to the Tuskeegee Syphillis Experiment, to Henrietta Lacks, so on and so forth, Black Americans have had good reason to not trust the American government or medial science(CDC, Nature). The harm endured by Black people is often shared via some type of oral tradition like griots in the African continent, or the harm is directly experienced in the present day. Present day trends include the mortality rate of Black women in labor, the less aggressive pain management of Black people, etc. (Menits et al, Public Reference Bureau). Prior research supports these notions in that Black people were least likely to trust in the government and medical science before the pandemic, and ‘after’ the pandemic that number grew dramatically (Kricorian et al). This growth in mistrust suggests a perceived mishandling of the pandemic on the part of the government and medical science. Since Black people have been infected, hospitalized, and died from COVID at a disproportional rate compared to larger ethnic groups in the United States, the mistrust appears valid.

This distrust for government and medical science extends to vaccines resulting in vaccine skepticism throughout the Black community (Jimenez et al, Khubchandani et al). Despite Black people recounting the horrors of job loss, housing insecurity, food insecurity, lost loved ones, etc. all motivating intense information seeking behaviors; Black people were still skeptical or unwilling to be vaccinated because of a deeply ingrained fear of medical experimentation(Jimenez et al) . Distrust for the government also led Black people to more easily believe in conspiracy theories or unverified claims about COVID (Jimenez, Neely et al, Boot et al).

Spirituality and Information

Although Black people are by no means a monolith, generally speaking the Black community are a people of faith(Mohamed, Beesher et al). As such, praying and faith played a large role in information “verification”. Prayer was often used to gauge the quality of information or in critical decision making processes. When information could not be easily evaluated for its truth, then prayer would bridge the gap. Prior research has also found that faith and overall spirituality is a critical resource for managing psychological duress, especially among minorities(Lachlan et al). Therefore, faith and prayer not only serve as a way to evaluate information, but as a safe haven in times of crisis.

While there is some research about general information seeking behavior under COVID, and much is known about health-information-seeking behavior among Black Americans, but there is little research so far specifically considering Black Americans COVID-related information-seeking behavior as it relates to Black Detroiters. The current literature does not dive as deeply into how the bias of media outlets alienates Black viewership, how the presence of White people makes information less credible for Black people due to racially motivated distrust as a result of medical experimentation. Additionally, the literature doesn’t deeply explore the relationship between economic impact and the message that sends about the severity of COVID.

Methods

In this study we conducted 13 semi-structured qualitative interviews. Interviews were conducted remotely via Zoom and lasted between 46-95 minutes. Study participants were recruited through a variety of sources including: Facebook, Twitter, GroupMe, Instagram, and email groups. Nearly 30 individuals applied to participate in the study via Google Forms, but 13 were selected after reviewing their eligibility criteria.

The sample included individuals with education ranging from a High School Diploma to the graduate degree level. Annual individual income ranged from unemployed to $150,000 per year. Participants were required to be self-reported residents of Detroit, Michigan from December 2019- February 2022 at some point just before and, or during the pandemic, at least 18 years of age, and Black/African-American. The final tally of participants included 9 females and 4 males between the ages of 20-73 years old.

We chose the city of Detroit, MI for our population of focus because it is by percentage the Blackest city in America, consisting of more than 77% Black people. The state of Michigan's general population consists of approximately 13% Black people, however Black people accounted for more than 19% of total deaths in the state. Therefore, we theorized that Black Detroiters likely comprised a great many of those 19% of Black deaths, and as a result their information-seeking behaviors would be invaluable in understanding how to better serve the Black population in Michigan as a whole as it relates to information framing, distribution, and dissemination, etc.

Participation in the study was voluntary and confidentiality was guaranteed, participants were de-identified in the following format, Participant 1 (P-1). All of the participants provided verbal informed consent. All interviews were conducted either via Zoom or phone, and a $25 incentive was offered for participants.

The types of questions asked of participants ranged from questions about when, and how they learned about COVID specific topics such as, new strains, travel restrictions, etc. Additionally, questions asked about self-reported major events that prompted information-seeking behavior and all granular steps that went into that process. Some example questions are below:

- When did you first learn about Covid? **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
- What particular event during the pandemic alerted you to the seriousness of Covid? **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
- What role did your faith play in information finding and decision making about COVID? Religious leaders, etc.?

Please refer to the appendix for a list of the semi-structured interview questions.

Content analysis was performed via affinity walls by clustering the data to find commonalities, themes, and trends in the participants' responses. Miro, an online Whiteboard tool was used to

carry out this process. This process was carried out several times until the data was distilled into several distinct categories which comprehensively described the experiences of the participants. The high-level categories are represented in the top level findings of the findings section. The selected categories guided the presentation of the findings.

The findings section reports on the most salient themes and subthemes we found. The selected quotations exemplify the core topics, problems, and concerns that were the basis for the themes and subthemes.

Findings

The findings of the study fell into four primary categories: Background, Sources of Information, Judging Criteria, and Vaccine Behavior. Findings include key summary information followed by granular descriptions, and supporting quotes.

Background Factors

There were several background factors which colored participant perception of COVID, fueled conspiracy theories, and helped to make the reality of COVID more credible.

Economics

Economically significant events and or events at the national level served to legitimize and prompt participants to further research the pandemic. One participant stated that they finally believed the pandemic was real when the NBA shut down, because White people wouldn't risk losing all this money for some hoax;

> *"The NBA show. The NBA show. Once Rudy Gobert caught it... Rudy Gobert caught it, and I think Donovan Mitchell caught it, and then it was soon after that, bro. That junk had to be a week later, less than a week later. That's when I was like, "Oh, shit. This shit is serious," because that's a lot of money" (P-11, 28 y.o. single father)*.

P-11 found most other information about COVID-19 to be skeptical, for example, new record numbers of cases, and deaths every day seemed unlikely. However, in a country where money and the economy is more valuable than human lives, the planet, etc. then there must be something to this whole 'pandemic' if revenue generation is being halted. A less business-centric takeaway, but with economic ramifications was the full transition of the University of Michigan to virtual learning. "*I remember when I heard that the school was closed, I remember being a student at U of M. I graduated in 2000, so '96 to 2000 school never closed. So that for me was like I said, something is really going on here*" *(P-2, 43 y.o. woman)*. An

unprecedented event caused by COVID-19 communicated to P-2 that this was a very serious situation.

Additionally, others were simply more business minded, so how devastated the economy was prompted more information seeking behavior, *“What that was going to do economically. And me being someone that is focused on having the understanding of economic macro/micro environments, my focus really started to go there and realizing, "Oh, okay. This is truly disruptive to the order and the way of things “ (P-5, 32 y.o. Entrepreneur).* P-5 having experienced different kinds of illnesses before had never seen the economy so radically affected by an illness. For entire industries to be brought to their knees by COVID-19 communicated a true severity. A disaster is one thing, but a disaster that affects your bottom line is something completely different.

The willingness to pour out billions into the economy made others wonder where the money had come from if we were in debt as a country and why reparations couldn’t be paid to Black people? *“It also showed me that reparations could be done at the push of a button, but that’s another conversation” (P-9, 29 y.o. Graduate Student).* P-9 observed from afar that the United States’ appropriations committee in Congress liberally distributed money seemingly only for war, tax breaks for the rich, and bailouts for the rich. Therefore, to see the government go into its “pockets” to help the average citizen with stimulus checks in addition to the money for small businesses showed true concern on the part of the government. P-9 also felt a further lack of concern from the government toward Black people, because if there was enough money for individual payments to millions of Americans, then there is enough money for reparations for Black Americans. Therefore, reparations are not a matter of “lack of funds”, but it’s a matter of the government simply not caring enough about Black people to make it happen. These combination of factors both communicated the seriousness of COVID, and further exacerbated the distrust Black Americans have with the government. However, for some the CARES Act, legislation that provided quick direct payments to businesses and individuals, pausing student loan payments, and the direct payments resulted in more participants researching the legislation which provided the money, but not Covid per say (Treasury).

Government/Trump

Many participants blatantly did not trust the federal government because they seemed unprepared and ill-equipped to handle this disaster compared to reports of other countries' experience with COVID. Certain reports out of the WWhite House actually triggered conspiracy theory alarm bells in the minds of certain participants. Those conspiracy sentiments are shown in participant 11 stating, *“When I think about that stuff, I just always go back to this is some type of plot to kill people and make money off the medicine that was created” (P-11, 28 y.o. Single father).* P-11 felt with every news report from the government about increased deaths, new record cases every day, and yet another company producing a vaccine, that this was one big money grab. P-11 noted that conspiracy theories are easier to believe and that laziness may be a reason why he entertains them, but also noted that Black people have good reason not to trust the government and only paid any attention to Trump concerning stimulus checks.

Participant 9 felt a bit differently, expressing that *“Well, Trump is a White supremacist, so there's really nothing he can say that I will trust or believe or see as factual or something that I need to take into consideration” (P-9, 29 y.o. Graduate student).* P-9 was convinced that Trump was and is a White supremacist, therefore nothing he said was even worth listening to. Trump's racist language and rhetoric completely alienated P-9 from anything he had to say, however P-9 was still open to hear information from the experts from the White House, like Dr. Fauci who is the director of the National Institute of Allergy and Infectious Disease (NIAID) and advisor to the president. Fauci has served in an advisory capacity to six presidents for various public health crises.

Contrasted with P-9 and P-11, P-10 put no trust whatsoever in anything coming from the government, *“Because the government is shady. They don't do nothing right, as far as anything” (P-10, 43 y.o. mother).* P-10 felt as though everything the government did was in the interest of itself, and not the people. P-10 further expressed that sexual assualt in her past, and a requiste lack of action from the legal system further pushed her away from trusting anything government affiliated.

P-9 further expressed a sentiment that was shared among many participants, *“I was just overwhelmed because it was just like we were in this whole pandemic and Black people are being murdered.” (P-9, 29 y.o. female Graduate student).* To be in the middle of a pandemic, and be part of a population experiencing the greatest mortality, and yet still be victims of state-sanctioned murder at the hands of police officers proved to overwhelm and dishearten many participants. The entire situation felt like one great paradox. How could a government supposedly care about our well-being as it relates to COVID-19, but then allow police officers to kill Breonna Taylor, Ahmaud Arbery, Geroge Floyd? Even amidst a pandemic, the anti-Black hate did not skip a beat.

State and city government sources were more trusted, primarily due to Governor Gretchen Whitmer's quick action, and lack of perceived anti-Blackness even though many were adversely affected by the Stay-Home-Stay-Safe order. Sources like the CDC, Michigan Department of Health and Human Safety (MDHHS), etc. were trusted as well (Detroit Regional Chamber).

Sources of Information

Sources of information were common among participants, however their overall feelings toward those sources, how they used them, and how trustworthy they were varied.

Social Media

Social media served a great many purposes during the pandemic for many participants including, but not limited to: primary and secondary information sources, a discussion platform for popular topics related to COVID, a place to interact with medical experts, etc. For some it

was a place to get more credible information, because the news was seen as being politicized while people's stories were pure and simply their own experiences. *“An everyday person, I would feel like they don't really have a reason to spread a lie or mislead you. They're just simply saying what their experience is or what they've seen in their own life with their own network” (P-6, 31 y.o. woman).* Many participants felt as though large media conglomerates were pushing narratives and perspectives that aligned with their base rather than reporting factual information. Therefore, an individual simply reporting their lived experience online was viewed as a more honest source of truth, because they had nothing to gain by misleading others.

For participant 7 social media, specifically Twitter, was how they learned about the very existence of COVID-19, *“I first learned about COVID on Twitter” (P-7, 21 y.o. Undergraduate student).* Participant 7 also expressed that young people generally don’t really watch the news, and that social media is their preferred way to gather information. Reading Twitter comments, and scrolling through multiple articles from multiple sources was both convenient and informative. *“I find the comments more valuable because a news source can make any claim they want for the title, and people will comment on the title in itself saying, "Oh, this is absurd," but people actually go in and read the article and point out specific things that they highlight as false, or they highlight it as untrue. And I find that more informing than the actual title of the news source because you can never tell what the actual article's talking about “ (P-7, 21 y.o. Undergraduate student).* Social media comments helped provide a sneak peak of articles without the time-consuming read and rhetorical strategies between to encourage a certain response from the reader. Contrasted with Participant 1 who used social media less as a source of information, but more so to see what the general experiences of people in their network was, *“I feel like I was definitely on social media too as well, like kind of scrolling and looking to see what people were saying” (P-1, 23 y.o. Graduate student).* P-1 had a great deal of trust in scientific information as a graduate student, but felt a sense of comfort in seeing how the science aligned with the personal experiences of those within their network.

The simpler the delivery of the info, the better. A variety of social media applications were used including, Facebook, Twitter, Instagram, and Clubhouse. Participants already spent a large portion of their time on social media, so information finding was convenient. Facebook and Twitter often streamed the news as well. Many individuals learned where to be vaccinated, heard peoples’ stories about side effects, and about testing sites, etc. Some were even in Michigan COVID-19 groups. Hearing people's stories was key, and those stories are not always shown forth in numerical data.

Church & Faith

Church served as an information source, and an overall place of comfort for many during the pandemic. Some churches even served as testing and vaccination sites, and their leaders encouraged masks and vaccinations many times. “*Once vaccines came out, my pastor was like, ‘Go get vaccinated. Go get your second vax. Go get boosted,"’so they were very supportive” (P-1, 23 y.o. Graduate student).* Church leaders often served as examples for the safety of

vaccines, sharing with their congregation that they have already been vaccinated to ease apprehension and skepticism. The Black church in particular is seen as a refuge and overall place of safety, so getting information about COVID from their place of worship made the information generally more palpable and believable for many. Contrasted sharply, P-6 felt much differently stating that, *“Right, right. That's crossing hairs or that's a conflict of interest type of thing. Because it's like, why are you encouraging a certain message in a political... Anything outside of religion or faith or things like that, I don't think they should make statements on one side or another “ (P-6, 31 y.o. woman).* The idea that a house of worship or religious leader would comment on personal medical decisions felt like a mixing of church and state for some participants and it was not acceptable. Those who shared this sentiment felt as though it was appropriate for a pastor to inform, but not to push anyone in a particular direction. For example, it is acceptable to tell your congregation to go vote, but not to tell them to vote Democrat. This sentiment speaks to the politicization of vaccines in general; while they should be simply viewed as a public health measure, they have been turned into a partisan issue.

Many participants expressed that prayer and faith helped them decide whether or not to be vaccinated and in some cases, which vaccine to get. *“I have prayed a lot for clarity on whether I should get vaccinated even with the data, because I guess personally, I don't even get a flu shot “(P-13, 39 y.o. woman).* P-13 didn’t consider themselves anti-vaccination (anti-vax) at all, but didn’t care about getting the flu vaccine, however they recognized the difference in severity between COVID and the flu and acted accordingly. However, the decision was not taken lightly, so even after information gathering, and speaking with friends, prayer was the action that truly made the difference and provided comfort. P-13 signed up to receive each a different dose, e.g. Pfizer, Moderna, J.J., at a different health system, and was selected for Pfizer first, and took that as a divine sign to move forward and be vaccinated.

Some participants stopped attending church in-person to take extra precautions and to preserve the health of the immunocompromised and vulnerable. Virtual church services, often over zoom, provided community and information on vaccination sites, mask availability, and testing sites.

Network & Word of Mouth

Word of mouth was a huge information highway for COVID related information, with many stating information was simply ‘common knowledge’ because they had heard the information in passing at one place or another. Information often simply found people in more of a passive fashion. COVID was top of mind for many, so conversation was often unavoidable.

Family discussions about COVID-19 were also prevalent. There were often a select number of people within the families of participants who served as primary and secondary information sources to try and convince their loved ones to become vaccinated or at least adopt safety precautions like masking up and social distancing. *“I wasn't just getting information about COVID and a COVID vaccine for myself. I was getting information so I could be more informed*

and could translate it in a more accessible way to my family and parents and friends and people that I know who are very vaccine hesitant" (P-9, 29 y.o. female Graduate student).

Word of mouth information seeking and sharing was a tool to quickly gather information and share with those within the same social network. Many participants felt compelled to become the source of information and truth for their families after learning critical information from their trusted sources via word of mouth, *"I just, I mean, I talked to people that I trusted and whose opinions respect "(P-9, 29 y.o. female Graduate student)*. Those family members who became information distributors were often medical professionals to some degree and were trusted more than other family members for that reason. *"My family who are in the medical field, they kind of served as my source of truth in terms of seeking out information about COVID." (P-4, 35 y.o. man), "So a registered nurse or certified nursing assistant something. She's something, she works in healthcare" (P-8, 34 y.o. father).* As we can see from P-4 and P-8 among other participants, family members who were in the medical field were being called upon by their family often to provide information, explain information learned via different sources, and help identify misinformation. Although participants generally had a skepticism and distrust for the medical field, their Black family members eased some of those feelings of distrust.

Learned about Vaccines, Tests, etc.

Participants learned about testing from social media, the news, flyers, billboards, their employers, etc. *"I would say billboards, news, social media. Again, given my employment, I was constantly in the know. They were doing a good job of kind letting us know when those were more available" (P-12, 39 y.o. Nurse & Father).* P-12 as a healthcare professional was bombarded with information from his job, but things like billboards, new commercials, etc. still provided a great deal of information as well. P-9 encountered a variety of sources as well for information about tests, vaccines, etc. but with an emphasis on Detroit-based sources, *"The Detroit-based news is how I learned about where to get vaccinated in particular. Then also, the city of Detroit Instagram page is where I learned about where to get vaccinated or where you can get tested for COVID and where urgent cares you could go to, etc." (P-9, 29 y.o. female Graduate student).* As a resident in downtown Detroit, P-9 depended on regular updates from local media and the city to be informed about the most current preventative behaviors. Several participants never got tested, but felt as if they had COVID-19 simply based on the symptoms, but did not want to confirm.

Individuals also cited that there needed to be more testing methods for individuals without cars, most testing locations in Detroit were drive-thru style, *"but I remember learning that CVS and you could do drive through testing. I know I went my first few times, my mom took me because I don't drive" (P-9, 29 y.o. female Graduate student)*. In a city like Detroit where there has been a great emphasis on developing public transit, walk-up COVID-19 testing centers were expressed as being in great need. Additionally, lack of access to transportation is a common barrier-to-care associated with low SES, as such, it is critical to be mindful of those without cars. Many

participants did not understand the point of the masks or social distancing because they were so un-uniformly required, but complied to keep the peace. Things like travel restrictions were primarily learned about via airports and from the destinations intended for travel. Hospitals being over capacity was common knowledge, and resulted in delayed care for many.

Judging Credibility

Judging or gauging the credibility of an information source was a multivariable process for study participants. Former experience with the news source, the expertise or credentials of the reporting entity, and whether or not the information source was a Black person all played a role in determining credibility.

Expertise/Trustworthiness

Credentials from credible sources and high-ranking institutions are an integral attribute for an individual to have when considering whether or not the source is trustworthy. Their overall track record in dealing with issues like this before is also a contributing factor within the myriad of things to consider. *“It depends on what the subject matter is, but with COVID specifically, my approach at least has been listen to the experts”(P-13, 39 y.o. woman).* P-13 described herself as valuing expertise as an individual who holds an advanced degree. They understood the work that went into developing expertise and as a result trusted and valued the expertise when presented.

In addition to being an expert, having a former history with the network is also something that plays a large role in gauging credibility. *“And again, she was somebody I knew of prior to COVID.” (P-12, 39 y.o. Nurse & Father).* P-12 among other participants, noted that being familiar with a source, network, or pundit prior to the pandemic made them more trustworthy during the pandemic. That preexisting relationship allowed the source to display intellect, critical thinking, bi-partisanship, and overall expertise- all those skills were thought to be easily applied to the COVID-19 pandemic as well. However, participants also noted that if they had never heard of a source before, then it has the opposite effect. Also, if an individual's parents have held a network in high regard for many years, then their parents' trust in the network is almost inherited. The veracity of the source could easily be found based on how well done or professional the medium, e.g. typos in an article, or poor lighting in a video. “Common sense” and basic critical thinking was also a method used to test whether or not information made sense.

P-9 also noted the following, *“I mean, credentials matter to me, and I know there are credentialed people who do a lot to harm in our community and outside of our community” (P-9, 29 y.o. female Graduate student).* There was consistency among the emphasis on credentials, however P-9 noted that credentials alone does not necessarily protect Black people from the alterior motives of those who have credentials. A degree and a fancy title does not make one a good person, but it does potentially give them a tool to do more harm without being questioned.

Race/Ethnicity

Interview participants overall strongly felt that hearing from a Black person made information more credible. Many interview participants referenced Dr. Joneih Khaldun, Chief Medical Executive for the State of Michigan and the Chief Deputy Director for Health in the Michigan Department of Health and Human Services (MDHHS), and her press briefings with Governor Whitmer. *“She has a Black face I feel like... I just do trust Black people in those spaces. I just... I'm privy to believe a Black person over White person. That sounds so terrible.” (P-6, 34 y.o. woman)*. P-6 described trusting Dr. Khaldun simply because she was a doctor and had a Black face, and stated that she would trust a White doctor less in comparison because they are White and therefore less trustworthy for many historical and present day reasons. P-2 felt similarly, but following a well known sentiment in the Black community, that Black people must be “twice as good to get half as far”. P-2 stated, *“being an African American woman, you don't get to those types of positions if you don't know your stuff” (P-2, 43 y.o. woman).* Therefore, simply being in a position where the governor of Michigan relies on you to lead the effort against COVID means you are more than qualified to do so. Broadly speaking, participants just wanted to see a Black face, someone who looked like them reporting or explaining the information, with the logic likely being that Black people wouldn’t facilitate harm against their own. *“I think that that was just important for me to hear people who look like me. I just feel like I trusted them more.” (P-9, 29 y.o. female Graduate student).* Aligned with previous participants, P-12 felt being a Black medical professional made Dr. Khladun more credible as well, but so did being a mother,

> *“I think the information was probably a little better perceived. It always feels good when you can get something from someone who kind of resembles you, in my opinion. but I just honestly felt as though she was a level head. Because there was others of my color who would speak and give information, and I did not perceive it. So I think her as a person, it did not hurt that she was an African American mother, a medical professional, that did not hurt. But she just seemed credible to me.” (P-12, 39 y.o. Nurse & Father)*

Prior research has shown that individuals generally do more due diligence and fact checking concerning COVID when they have children, so it is likely that this logic was at play since P-12 is also a medical professional and a parent making the doctor more trustworthy for those reasons as well.

Participant 8 stated rather plainly that seeing White people on TV reporting information was challenging for him, and he tended to avoid such sources in favor of familial sources, and word of mouth from other Black people. *“Because I wrestle or I'm challenged with quite regularly, with the White presence on TV, White presence in general in this country. That's just a thing for me “ (P-8, 34 y.o. father)*

Fact Checking

Participants also felt that fact checking was very important, and the more sources one found the better. *“In truth, man, I don't want to pretend that I have a super informed or sophisticated process. In the moment, is just take in flood of information from as many different sources and be open.”(P-5, 32 y.o. Entrepreneur).* Particularly early on in the pandemic when anxiety was high and verified information was hard to come by participants took in as much information as possible and fact checked based on what they described as common sense, and then word of

mouth. As the pandemic continued on, multiple sources of information were still prized, but determining fact versus fiction was simpler.

Consistency among a variety of trusted sources meant there must be some truth in the information. *“I go by, if I see three things, I see the same three things, like my grandma used to tell me, that's what I believe, "If you see one thing three times at least." It got to be more than one person is saying it, I got to start looking into it. You know? But if one person just says, "Oh, do this." Or, "Do that." No. I can't just go by them. I got to actually go look into it myself.” (P-10, 43 y.o. mother).* The simple fact that several sources said the same thing meant the information was either worth considering or outright correct. This methodology of fact-checking was also a time saver for those who may not have been particularly health literate, but used their deductive reasoning skills to draw what they deemed as reasonable conclusions.

However, if there was a blatant political leaning in the information, it would cause many to have doubts, and even resulted in a reduction in viewing.

> *“Yeah, just do a little bit more research into who the author was, who the funding sources were, behind these articles or behind these groups. What are the political base of these groups? And oftentimes I would find out that a lot of that complete like erroneous right wing type information, it would definitely be connected to some type of political base. Again, when I mentioned earlier, like when I try to gather information, I would like to know the information is not politically biased. So if I found any that was heavily politically biased, that would be information I would... Like those sites, I would kind of start to pull away from, or those articles I would pull away from.”(P-12, 39 y.o. Nurse & Father)*

The source of the information was critical in fact checking, however if participants felt as though the information was trying to draw conclusions for them, instead of simply presenting information, then many would avoid those sources in the future. When fact checking, Google was the first stop for most participants, and few rarely went beyond the first page. Videos, comments, and anecdotes were the most popular source because they required the least effort. For P-11 as a single father there wasn’t a great deal of time to formally fact check information, but the news and word of mouth via loved ones proved sufficient for him. *“Verified reliability of information by Listening to the news and talking to other people”(P-11, 28 y.o. single father),*

Vaccine Behavior

Vaccine behaviors among study participants shared a number of common themes: vaccine hesitancy centered around fear of experimentation due to historical events of medical experimentation on Black people, e.g. Tuskegee Syphilis experiments in addition to apprehension about potential side effects due to the speed of vaccine production. Childhood vaccine practices eased some about the prospect of being vaccinated. Although pondering childhood vaccine practices is not on its surface ‘information seeking,’ it does speak to a critical aspect of how Black participants came to a decision about whether or not to be vaccinated. In reviewing and considering the information of their youth, participants incorporated that information into their own personal decision tree and came to a conclusion, to be or not to be vaccinated? While more general information seeking behaviors like Google searches, news

media, etc. were a factor, a type of information seeking of one's personal experiences proved integral. Overall the glaring number of deaths from COVID motivated many to be vaccinated despite their worries.

Vaccine Hesitancy & Side Effects

Vaccine hesitancy manifested in a number of ways. One of which being, if a person thought they were a healthy individual overall, they were less likely to consider being vaccinated. Some individuals became anti-vax when they learned the vaccine was not a cure, e.g. they could be reinfected, so what was the point?*“Even after they got the vaccine, people were dying” (P-10, 43 y.o. mother).* P-10 decided that if the vaccine could not prevent COVID, that holistic measures and social distancing would suffice for her family. The perceived risk outweighed the perceived lack of benefits. Others felt uncomfortable because of how quickly the vaccine was developed, and not knowing what the potential side effects were since everyone’s bodies are different. How can one vaccine be appropriate for everyone?

> *“It really was a personal decision, mainly because of how fast it was developed and how fast they released this vaccine and how little we actually know about the virus itself. So we don't know how to control it. It's a lot of question marks. And for me to take a vaccine for something that's questionable and that's constantly developing deltas and different strains, I don't feel comfortable or protected from this vaccine” (P-6, 31 y.o. woman)*

P-6, among other participants, felt there were simply too many unanswered questions about the vaccine and not enough willingness, ability, or transparency to answer those questions. Conversely, other participants weren’t bothered by the speed of the vaccine production because they understood the principles of getting a product to production and distribution quickly based on work experience. Nonetheless, the overall novelty and quick production of the vaccine was a deterrent to many, “*This seemed, it seemed new. They couldn't really tell you how often you would need to take it or that it would, there were a lot of unanswered questions “ (P-2, 43 y.o. woman).*

P-12 had no particular issue with the vaccine, but simply felt the vaccination rhetoric did not leave room for the personal experiences of the average person. *“I think people's personal experiences are incredible. I actually love hearing people's personal opinions, and I really wish, I've been saying this since COVID started, someone needs to start journaling and speaking with medical professionals about how they've dealt with this thing. Everyone's personal experiences are just so different” (P-12, 39 y.o. Nurse & Father).* Personal experiences often get lost in population-level public health initiatives, and as such, you risk alienating people who don’t feel represented in broad strokes approaches.

Black Experimentation

Several participants cited America's long and dark track record of medical experimentation on Black people as a precursor for their vaccine hesitancy. Bringing up events like the Tuskegee Syphilis experiment, and Henrietta Lacks cells being used without her consent, medical apartheid, etc. *“I think most of us in our community, we've heard about different experiments and different things. From bring experiments that have been done to our people, through our history, in regards to vaccinations and different things like that.” (P-4, 35 y.o. man).* The pain and trauma of the harm done to Black people is seemingly inherited and felt by the descendants of those who endured the harm. Coupling that inherited harm with the present day disparities and premature and preventable mortality in the Black community and a PTSD of sorts has become prevalent. *“So the whole Tuskegee experiment, although I didn't experience it, it leaves an indelible mark that you don't soon forget”(P-4, 35 y.o. man).* The previous quote from P-4 again alluding to the inherited trauma and harm associated with Black experimentation. One participant even stated, “ *Black people are the dominant race and the government is trying to study our bodies*” *(P-10, 43 y.o. mother).* These sentiments are likely attributable to the historical and present day belief that Black people have a greater tolerance for pain than other races, this sentiment has resulted in great harm against Black people.

Additionally, the sheer number of companies who contributed to the vaccine market turned away at least one participant, and raised the antenna of a few others. *“Pfizer got one and Moderna got one. Why can't it just be one company? Like one... Because everybody's is different. One, you get two shots. One, you get one shot. Everybody's is different. Because it's like a experiment. It's not 100%. It's maybe” (P-10, 43 y.o. mother).* P-10 felt as though three different companies making the vaccine made it feel more like an experiment than a true solution.

Life & Death, Holistic Practices, & Childhood Exposure

Childhood Exposure

If a participant did not recall doing something as a child, then they were naturally more skeptical of the practice as an adult. However, if they did recall doing it as a child, they were more receptive to the practice. *“If I didn't take it when I was growing up, I don't think they should either. I'm just being honest.”(P-10, 43 y.o. mother).* P-10 expressed these sentiments when discussing whether or not she would be vaccinated or vaccinate her children. The vaccines and medicines that she took as a child were proven safe, based on her reasoning, because she was still alive after having taken them decades earlier and without that evidence the risk was too great for her, or her children. Historically, remedies and recipes for medicines are passed down generationally in the Black community, so this is not a new concept. We see a similar sentiment in the experiences of P-2 and P-3, *“So I'm not anti shot. I think for me, it wasn't something we did it as a family. It wasn't something that was [new]” (P-2, 43 y.o. woman), “So I’ve never had an adverse reaction. So I figured, it won’t hurt me. I’d rather have it than not. They have a lot of immunizations and stuff. So I’ve had all those” (P-3, 73 y.o. woman).* Having experienced several vaccinations and medicines as children was all the information needed for P-2 and P-3 to become vaccinated. However, P-10 has expressed prior trauma and harm from the legal

system which she extended to the government which made anything coming from a government source less trustworthy.

Holistic Practices

Several participants were anti-medicine (“unnecessary” medicine) in general because they wanted their bodies to be as natural as possible without any external inorganic components.

> *“Unnecessary medicine is anything that... First of all, our bodies are brilliant. Our bodies are capable so much. And our bodies, when given the right stuff, will get to homeostasis, naturally. And so, far too often, medicine, our modern medicine, has become cheap shortcuts, and cheap shortcuts often have consequences that may not be immediately readily understandable, but consequences are consequences “ (P-5, 32 y.o. entrepreneur)*

This sentiment represents the longview, the benefits of a vaccine now may not outweigh the potential risks and side effects that are currently unknown. Therefore, holistic measures, preventive measures, and avoiding anything that is not completely vetted was the approach taken here. This concept is further driven home by P-10 who stated, *“I just... I don't want anything that's not supposed to be in my body. I don't want it.” (P-10, 43 y.o. mother).* Anything that is not natural or thought to be chemically produced was viewed as potentially harmful. At a more fundamental level, a lack of understanding of medicines, chemicals, etc. resulted in an unwillingness to indulge.

Towards this approach of being all natural, several participants attempted making their own medicines and remedies as they learned of them throughout their social circles, *“Say if I didn't have enough money for this particular medicine. I couldn't get that medicine. So I go to the dollar store. I look at the main ingredients, and I go to the dollar store and buy the main ingredient. And then I mix it with something else, you know? And then that would be the medicine” (P-10, 43 y.o. mother).* This approach avoided many of the chemicals which caused skepticism, but still allowed for participants to care for themselves and loved ones.

This mindset extended to things like the flu vaccine as well. Many participants compared COVID-19 to the flu, but acknowledged it was much more severe. However, a different selection of participants, even some who were medical professionals, were happy to try out different remedies they heard about from their peers because it ‘wouldn’t hurt to try’. Others simply took their daily vitamins, exercised and focused on their mental health as a way to keep their overall wellness at homeostasis. Those who were anti-medicine expressed that there would need to be a life or death situation for them to be convinced to take the vaccine, even after contracting COVID-19 more than once and started having never been as sick before.

Life & Death

There were essentially two camps as it related to vaccinations and mortality. The first being, the vaccination provided the best chance for survival. *“At that point, it was about survival for me and my wife.” (P-4, 35 y.o. man).* Participants who paid close attention to the total cases, deaths, etc. were waiting patiently for some sort of verified medical information that could give them a stronger layer of protection from COVID than just a mask or social distance. The second camp of individuals expressed they would have to be near death to get the COVID vaccine, *“I ain't going to get vaccinated, unless it comes to a point in life where people literally have to get vaccinated, it's no choice, that's probably the only way I'd get vaccinated “ (P-11, 28 y.o. Single father).* P-11 considered themselves an individual who rarely got sick, was also fairly enamored with several conspiracy theories, and had never had a personal experience with COVID. It was the combination of all those factors who led P-11 to conclude that COVID would need to affect them personally in a severe way to become vaccinated.

Discussion

The current study provides insight into the experiences of Black Detroiters’ information seeking behaviors during the COVID-19 pandemic. The following findings were compelling and salient among the participants. Like other groups, Black Americans appear to sift through a large amount of COVID-related information using sophisticated thought processes to come to their own conclusions. They demonstrate several tendencies when doing this that are less commonly seen in the White majority, such as using big national events as evidence of what's real; harboring some baseline skepticism about information delivered by broadcast news sources; incorporating background knowledge from their upbringing and the history of medical malpractice and experimentation on Black Americans; accepting the reality of the pandemic (or not) through the experience of people around them; and placing much greater trust in information delivered by Black individuals both within their circle of acquaintances and in the media.

In line with previous work (Jimenez et al, Neely et al, Kricorian et al, Mondal et al, Khubchandani et al, Jones et al), we found that Black people were wary of vaccines for a number of reasons, including but not limited to: fear of medical experimentation, overall distrust of the government, and misinformation regarding the efficacy of vaccines and conflating vaccines with cures.

However, our work revealed the novel finding that the relationship that Black people had with medicine and vaccines as children greatly influenced their sentiments towards vaccines in adulthood. Participants' sentiments toward the COVID vaccine were framed and colored by the experiences they had with medicine and vaccines as children. Participants used the information they learned from past experiences, both consciously and unconsciously, to form opinions and draw conclusions. The practices employed by the families of participants as children set the stage for their relationships with medicine in many ways. If a medicine or vaccine was taken as a child, they were often more likely to be willing to take medicine and vaccines as adults. Additionally, the medicine taken as a child was proof of its safety and efficacy for their children if the participants were still alive and well today. However, for some participants, without the historical data of having taken medicine as a child and surviving until now, they would not trust those vaccines or medicines for themselves or their children due to the unknown risks.

Certain holistic medicinal practices were passed down from generation to generation, and guided participants' interaction with medicines in the direction of avoiding all things “Big Pharma” whenever possible. The unknown side effects of the COVID vaccine in addition to an upbringing that leaned away from traditional medicine caused many to deem the vaccine as unnecessary medicine. This sentiment has been inherited by many in the Black community as a result of the harm done by the medical science community and the government, and those sentiments were exacerbated by the disparities in Black mortality throughout the pandemic. Additionally, the number of companies who were a part of the vaccine creation process, e.g. Johnson & Johnson, Pfizer, and Moderna, actually led some participants to infer that the vaccines were purely experimental. Although most assumed the race to create the vaccine was monetarily motivated, the number of players and speed of development communicated the potential for continued medical experimentation and unethical practices by the medical science community.The perception that medicine which has been around for several generations is more trusted was a common theme.

Furthermore, aligned with previous research (Tang et al, Neely et al, Kricorian et al, Reisdorf), we also found that social media was a tool used pervasively by study participants. Participants found an even greater sense of community through social media during the pandemic due to social distancing and stay-home-stay-safe orders. Also, the daily routine of social media made it simpler to come across information related to COVID-19 simply by scanning and scrolling. Equally important, aligned with previous studies (Reidsdorf et al), we found that the political bias that comes from traditional news sources was unattractive to many participants.

However, our work revealed the novel finding that social media provided an information source for many participants that was perceived as unbiased compared to traditional news media outlets. Several participants even preferred to scan the comment section under more traditional credible news sources on social media in an effort to separate fact versus fiction based on what people had to say. News conglomerates were seen as prioritizing money and thus not being interested in the truth, while the average person on social media has nothing to gain, and thus is innately more honest and trustworthy. Therefore even if the anecdotal evidence found on social

media cannot be applied at a population level it is valuable evidence when digested by the average person. We speculate that the anecdotal evidence that comes from social media is more attractive than empirical and quantitative evidence because the former allows for more experiential discussion. Our findings suggest that if an individual's personal experience does not align with hard data, then they feel invalidated. However, to hear a story online that mirrors your own, is very validating and thus more appealing.

Moreover, our work revealed the novel finding that the economic fallout of various industries and other glaring national events prompted study participants to consider the state of the pandemic as more serious and credible. Participants were often somewhat desensitized to the large numbers of deaths, but knowing how much money was being lost by businesses that are familiar to them increased the alarm.

The Black community has internalized the notion that the United States government, medical science community and most of its requisite parts do not care about Black lives. As such, it is likely that the deaths of Black people do not communicate severity when dealing with a large-scale issue. This is evidenced by the disparity in mortality rates for Black people during the pandemic, and also by the murder of Black people by police during the pandemic, e.g. Geroge Floyd, Breonna Taylor, Ahmaud Arbery, etc. Black people have learned that the problems of White people or true economic burden from large corporations are what communicates severity. It is probable that the Black community witnessed this in the way the Crack Epidemic was handled versus the Opioid Crisis; legislation for mass incarceration for Black people, and rehabilitation for White people. Also evidenced by the Wall Street bailout, etc. With this in mind, seeing the government provide stimulus checks to citizens, and also provide loans to businesses through the CARES Act again showed similar severity and thus proved that COVID was a real issue. Consequently, this federal outpouring of money also communicated a lack of interest in reparations for Black people because of slavery. A popular federal argument against reparations has consistently been that there is not enough money. However, with the outpouring of money from the CARES act the Black community identified a truth, it is not important nor a priority.

In line with other studies (Alsan, et al and Torres et al), we found that both the race and expertise of the individual producing the messaging matters and that knowledge gaps decreased and knowledge of preventive measures increased when exposed to messages from those with medical expertise regarding COVID.

However, unlike existing work (Torres et al) which suggests that race is a minimally important factor but in line with the work of (Alsan et al), our findings show that race is a significant contributor to a messenger's credibility and desire for additional information. Additionally, if the messenger is White, that actually lessens the credibility of the messenger. A distrust for White people is fundamentally linked to the race relations in the United States from slavery until

present day. Although Black people are no longer in chains, the system and institutional racism which perpetuates inequalities are fully operational. This knowledge has cultivated a palpable distrust of White people among participants in this study.

One reason we may have found that Black people use information from their childhood experiences to guide their behaviors with vaccines and medicine is because Black people tend to favor oral histories, similar to the historical framework popular in Afrocentric history and used by griots to catalog the events of the many cultures and subcultures throughout the African diaspora. This theory is also in alignment with Black people's tendency to favor word of mouth information-seeking and exchange as compared to other methods. Information that has been vetted and verified by other Black people may be perceived as inherently more safe. This may also explain why information that comes from Black people tends to be inherently more trustworthy provided you control for expertise.

Additionally, we speculate that another reason Black people may use big national events as evidence of what is real is because there has been an extraordinary amount of harm done to the Black community, such that there may be a large desensitization to what are generally considered disasters. When Black people consider slavery, reconscruction, Jim Crow laws, the countless health disparities, mass incarceration, the crack epidemic, etc. It takes a very large and impactful event to communicate seriousness and severity to a people who have already been through so much. When trauma is your normal day to day experience, then it takes something truly traumatic and devastating to make one react.

Limitations

There were several limitations in this study. The way we sought participation was skewed towards higher-ed subpopulations, and our sample was majority female. Semi-structured interviews are inherently susceptible to the bias of the individual asking the questions.

Additionally, the digital divide may have been a factor in the number of, or types of Black people that would have participated.

The memory, or recall of the participants was also likely a great limitation. The responses of the participants depended entirely on their ability to remember certain events, their habits, etc.

Recommendations

Trust in the government and medical science in general continues to decline for many Black people in the United States (Kricorian et al). In order to begin to turn the the tide, the following recommendations are clear based on our findings:

- When discussing vaccinations, and medicines, be very clear about the process and avoid telling people simply what they need. When discussion vaccines allude to childhood vaccines and remedies in advertisements to speak to vaccines safety, draw parallels to increase the comfort level of audience
- When attempting to communicate the seriousness of a public health crisis, making clear the financial burden by drawing on examples relatable to the audience, e.g. blue collar economic turmoil compared to White collar. People are somewhat desensitized to hearing large death tolls, but in a capitalist country money communicates seriousness
- Take advantage of the perception that everyday people on social media are inherently more trustworthy. Engage with people on social media with health professionals in comment sections, and sharing stories about encounters and experiences. Interpreting data as describing the average or majority and not being prescriptive of every individuals experience and direct engagement with health and public health professionals online
- Strategically placing Black healthcare representatives in highly visible positions on the news and social media to increase engagement of Black viewers and support information seeking behaviors

Conclusion

In approaching this topic we expected to observe that the popular sentiments regarding information seeking in the Black community would be that much more potent in a city like Detroit since it is by percentage the Blackest city in the United States. While more research needs to be done in order to draw such a conclusion, many important findings were observed regarding the way information is perceived, sought, assessed for credibility, disseminated, and then eventually incorporated into practice. As the government at all levels, healthcare professionals, and media outlets consider how to better interact with the Black population it is critical that we consider the individual and niche perspectives and processes that are involved in information-seeking.

Appendix

Quick Demographic Questions

[How old are you? Are you employed? What's your annual income? What's the highest level of education you've attained?]

Questions

1. Think back to a time early in the pandemic when you were seeking information about COVID. Can you tell me about a specific instance that you remember? What was on your mind when you started? How did you think about the process of seeking out information? **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news-**what about the news anchors made them trusting for you**), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
2. When did you first learn about Covid? **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
3. What particular event during the pandemic alerted you to the seriousness of Covid? **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
4. Was there ever a time during the pandemic when you needed to go to the hospital or attempt to schedule a medical appointment for any reason but were unable to? If so, how did you learn more about the reasons why? **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?

    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
5. Did the civil unrest of the pandemic remove your focus from COVID-19?
6. March 11, 2020 [Around March of 2020] The World Health Organization declared COVID-19 a pandemic, and on March 13, 2020 former President Trump declared COVID-19 a national emergency. Did either of these events motivate you to seek out more information about COVID? **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
7. What role did your faith play in information finding and decision making about COVID? Religious leaders, etc.?
8. Social media? Influencers? What platforms and people/why?
    - Read comments or stories? Why were they important/impactful?
9. [Stimulus Checks]On March 26, 2020 the United States Senate passed the Coronavirus Aid, Relief, and Economic Security (CARES) Act, which provided $2 trillion in aid to hospitals, small businesses, and state and local governments. Included in this economic relief plan were direct payments to Americans. How did you learn about this development? What did it tell you about the severity of the pandemic? **What exactly did you do? Please tell me step by step.**
    - Did news of this legislation prompt you to seek out more information about COVID and it's severity?
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
10. Governor of Michigan Gretchin Whitmer announced in March of 2020 that all K-12 school buildings, public, private, and boarding schools as well as all bars and restaurants dine-in, gyms, coffee houses, and most public places would be temporarily closed to slow the spread of COVID. Whitmer issues a statewide stay-at-home order for all non-essential workers. The order is for at least the next three weeks. Individuals may only leave their home or place of residence under very limited circumstances. How did you gain additional information about these events and their requirements? When schools began to shut down. **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?

    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
11. Are you aware of when Michigan had its first confirmed case of COVID-19? **What exactly did you do? Please tell me step by step.**
12. **Those who were vaccinated but still died… did that make you do things differently.**
13. At what point during the pandemic did you begin seeking information about remedies to COVID? **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
14. By April 17, 2020 Detroit announced that it would test all essential workers in the city. When or how did you become aware of COVID tests and their availability? **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
15. On December 11, 2020 the Food and Drug Administration (FDA) issued the first emergency use authorization for the Pfizer-BioNTech COVDI-19 Vaccine in persons aged 16 years or older. How did you become aware of this event and vaccine availability in your community? **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
    - **Did the speed of the vaccine development lead you to seek more information?**
16. Conspiracy theories…
17. A study on flu vaccination rates in November of 2020 showed disparities in vaccinations among minorities, suggesting similar trends were likely for the COVID-19 vaccine. How did you gather information about the safety and effectiveness of the vaccine? **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?

    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
18. Was there ever a point during the pandemic in which you pursued holistic medicinal remedies to COVID? **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
19. More than 520 million doses of the COVID-19 vaccines were administered in the United States from December 14, 2020 through January 10, 2022. During this time 11,225 reports of (adverse events following vaccination) were reported, but this does not mean that the vaccine was the cause of death (0.0022%). Did learning of any adverse reactions to the vaccines influence your decision on whether or not to be vaccinated? **What exactly did you do? Please tell me step by step.**
    - If so, how did you gather information to further support your decision?
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
20. At a certain point during the pandemic various countries including the U.S. imposed varying levels of travel restrictions. Were you aware of these restrictions? If so, how did you come to learn about them? **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
21. At a certain point during the pandemic various countries including the U.S. imposed mask mandates. Were you aware of these mandates? If so, how did you come to learn about them? **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?

22. Scientists eventually learned that reinfection of COVID was possible, when you became aware of this information how did you seek more knowledge about it? **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
23. Were you ever infected with COVID-19? Did someone you know ever become infected with COVID-19? **What exactly did you do? Please tell me step by step.**
24. Have you sought out information about the total death toll from COVID? **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
25. Are you aware of how many COVID-19 variants there are currently? **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
26. How did you seek out information about the Delta variant? **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?
27. How did you seek out information about the Omicron variant? **What exactly did you do? Please tell me step by step.**
    - Did you hear the information incidentally (for example, as you were casually watching the news), or did you intentionally seek out information?
    - Did someone direct you to a particular source? If so, whom?
    - How did you approach finding the information that you wanted?
    - How did you decide whether the information was reliable?
    - How did you feel about the information you found?

28. Did anyone you know contract COVID? **What exactly did you do? Please tell me step by step.**
    - If so, did that change the way you sought information about COVID?
    - How so? Please be specific?
29. **Voting**
30. **Do you have at home internet access?**
31. **How many hours a day did you watch the news?**

Final Question

Do you know other individuals who may be interested in participating in this study? If so, please share this screening form with them asap. https://forms.gle/CQsZjxUS5fLfvbcj6

Conclusion

Those are all the questions I have for you. If anything else occurs to you after I leave, please don't hesitate to let me know by email at willidar@umich.edu. I may be in touch with you again to ask a few follow-up questions.

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