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ARTICLES

Black People Narrate Inequalities in Healthcare Systems that Hinder COVID-19 Vaccination: Evidence from the USA and the UK

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Abstract

The coronavirus disease 2019 (COVID-19) pandemic is an unprecedented global health emergency. As a novel condition, there is no known definitive treatment for the condition, except for the use of vaccines as a control measure. In the literature, the issue of inequalities in healthcare systems has been documented as a hindrance to COVID-19 vaccination; however, the specific inequalities in healthcare systems that hinder COVID-19 vaccination are poorly understood. Guided by the fundamental cause theory (FCT), this study aims to address this gap among Black people, a minority group vulnerable to inequalities in healthcare systems. Thirty-five Black people (age range = 21-58 years) residing in either the United States of America (USA) or the United Kingdom (UK) participated in this study. Qualitative data were collected and analyzed using thematic analysis. Most USA participants and a few UK participants narrated that no inequalities in healthcare systems hinder them from receiving COVID-19 vaccines. Contrarily, most UK participants and a few USA participants narrated inequalities in healthcare systems that hinder them from receiving COVID-19 vaccines. These are mistrust of the healthcare system, health policies regarding COVID-19 vaccination, historical factors (such as historical abuse of Black bodies by health professionals), residential location, and dissatisfaction with health services. In terms of what governments must do to correct these inequalities, participants recommended the need for acknowledgment and community engagement. This is the first international collaboration to examine this problem. Important implications for theory, healthcare systems, and COVID-19 vaccination program planning are highlighted. Finally, there are members of other minority groups and vulnerable communities who are not Black people. Such groups could face unique inequalities that hinder COVID-19 vaccination. Therefore, future studies should include such groups.

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Keywords Black people · Inequalities · Healthcare systems · COVID-19 vaccination · Qualitative research · The USA · The UK

Introduction

Minority groups such as Black people face a lot of inequalities as far as healthcare systems are concerned (Blom et al., 2016; Dickman et al., 2017; Levine et al., 2016). These inequalities contribute to poor health outcomes for Black people, including high mortality rates (Levine et al., 2016). As the coronavirus disease 2019 (COVID-19) pandemic persists, vaccination against the virus is one of the most effective ways to mitigate the pandemic (World Health Organization, 2021). The co-authors of this paper, in a study conducted from 05 to 12 February 2021, suggested that inequalities and racism within healthcare systems could be among the factors that hinder COVID-19 vaccination among Black people (Ogueji & Okoloba, 2022). As this finding is worrisome, it is more worrisome that as of 8th January 2022, when the current paper was written, no study has exposed what inequalities in healthcare systems hinder COVID-19 vaccination among minority groups such as Black people.

Related papers reported data on, minority communities' views toward participation in COVID-19 vaccine trials (Ekezie et al., 2021; Warren et al., 2020), and COVID-19 vaccine hesitancy among ethnic minority groups (Razai et al., 2021). Another related paper explored race, ethnicity, and COVID-19 vaccination among UK healthcare staff (Woodhead et al., 2021) but failed to provide a comprehensive report on the inequalities in healthcare systems that hinder COVID-19 vaccination among Black people.

Building on Ogueji and Okoloba (2022), the current study, an international collaboration, aims to expose the inequalities in healthcare systems that hinder COVID-19 vaccination among Black people in the USA and the UK. In 2020, the US Census Bureau reported that compared to the report from the previous census, more African Americans (Black only or Black in combination with another race) live in the USA; the current reported population is 46,936,722, which is about 14.2% of the American population of 331.5 million (US Census Bureau, 2020). In the UK, as data about ethnicity are collected through the 10-year census, the latest report showed that the percentage of the population from a Black African background doubled from 0.9% in 2001 to 1.8% in 2011 in UK nations (Office for National Statistics, 2020). These statistics reflect that the USA and the UK have high numbers of Black people residing there, and the population is likely to increase in the coming years. Notably, Black people in the USA and the UK are highly vulnerable to racism and inequalities in healthcare systems (Blom et al., 2016; Dickman et al., 2017). The steadily growing population of Black people in the USA and the UK, and their vulnerability to racism and inequalities in healthcare systems in these countries, underscore the need to make these countries the focus of this study. Based on available data (e.g., Ekezie et al., 2021; Razai et al., 2021; Warren et al., 2020; Woodhead et al., 2021), we believe that our study is the first to explore inequalities in healthcare systems that hinder COVID-19 vaccination among Black people in countries (the USA and the UK) with a steadily growing population of Black people.

We employ the fundamental cause theory (FCT) to explore how inequalities in healthcare systems hinder COVID-19 vaccination (Phelan & Link, 2013). Based on the FCT, we argue that ethnic and racial factors or related factors contribute to inequalities in healthcare systems. This can limit COVID-19 vaccination among Black people (Ogueji & Okoloba, 2022). What is, therefore, needed is to understand what specific inequalities in healthcare systems hinder COVID-19 vaccination among Black people.

Among the World Health Organization's (WHO) building blocks of healthcare systems is access to essential medicines and vaccines (World Health Organization, 2010). Thus, we believe that understanding the inequalities that hinder COVID-19 vaccination among Black people will inform interventions aimed at fostering fair access to COVID-19 vaccines. Ultimately, this will significantly contribute to strengthening this building block of healthcare systems and reducing the health threats from COVID-19 and its subsequent variants. Further, the media reported that experts have argued that the COVID omicron variant is linked to vaccine inequalities arising from healthcare systems (Smith, 2021). However, through empirical studies, these inequalities can be tackled. Thus, we present the following questions:

1. What inequalities in healthcare systems do Black people in the USA and the UK face that hinder them from COVID-19 vaccination?
2. What efforts must governments implement to correct these inequalities?

Method

Participants

This qualitative study employed a snowball technique to recruit participants via social media platforms (Facebook, Twitter, LinkedIn, and WhatsApp). A statement that politely requested participants to share the data collection form link with potential participants was included in the data collection form. Thirteen participants from the USA and 22 participants from the UK started the survey and provided complete responses. Of the USA participants, seven identified as males, five identified as females, and one preferred not to indicate gender; while of the UK participants, 11 identified as males and 11 identified as females. Thus, a total of 35 participants participated in this study. In total, participants' ages ranged from 21 to 58 years. All participants had attained education at the tertiary education level.

Of the 35 participants, 16 had never tested positive for COVID-19, while 19 had previously tested positive for COVID-19. Further, 19 of them have been vaccinated against COVID-19, while 16 have not been vaccinated against COVID-19. To participate in our study, it was required that potential participants were 18 years or older, English-speaking, provided consent, identified as Black/African residing in the USA or the UK, had a digital device, and had internet access.

Material

We collected data using Google Forms. Through this, we elicited consent using an online consent form and demographic information including gender, age, highest education attained, country of residence, ethnic identity, history of COVID-19, and COVID-19 vaccination status. The Google Forms also included an introductory page that explained our research's aims and objectives, as well as the meaning of inequalities in healthcare systems. It also politely requested participants to be elaborative with their responses. Based on the FCT (Phelan & Link, 2013), a critical review of the literature (e.g., Blom et al., 2016; Dickman et al., 2017; Levine et al., 2016; Ogueji & Okoloba, 2022; Razai et al., 2021; Warren et al., 2020), and consultation with a random sample of seven Black people/Africans residing in the USA and the UK (who were not included in the main study), the following questions were developed and used to elicit open-ended responses from participants:

1. If you have tested positive for COVID-19, how was your ethnic identity a challenge while trying to access treatment?
2. If you have not been vaccinated, please describe what inequalities in the healthcare system limit you from getting vaccinated.
3. If you have been vaccinated, please describe what inequalities in the healthcare system limited you from getting vaccinated before you got vaccinated.
4. For those who are and are not vaccinated, how did/does your ethnic identity limit you from getting vaccinated?
5. For those who are and are not vaccinated, what health policies do you think hinder COVID-19 vaccination among Black people?
6. For those who are and are not vaccinated, please describe what efforts must be taken by governments to correct the inequalities described above.

Data Collection

We collected data from our respective countries (Nigeria, the UK, and Kenya). Weekly for about three weeks, we sent the link to the online survey to various social media groups for Black people/Africans residing in the USA and the UK. Only one response was allowed for every participant. As data collection was on, we met virtually to discuss the meaning of participants' responses and their potential implications for data analysis. Data were collected until no new theme was identified from participants' responses (Guest et al., 2020). Following this, all data were exported for cleaning and analysis. Throughout our study, we adhered to necessary ethical considerations, including informed consent, voluntary participation, confidentiality, and anonymity.

Data Management and Analysis

Using thematic analysis, an inductive approach was employed to analyze the data. The six steps of thematic analysis by Braun and Clarke (2006) were followed. The

first author (IAO) and the co-author (MMO) applied the six steps, with the first author taking the lead role. Both co-authors are skilled in the application of thematic analysis in qualitative research (e.g., Ogueji & Okoloba, 2022; Ogueji et al., 2021). Further, all authors carefully conducted member checking with eight participants (four USA and four UK participants) to enhance the correctness of data interpretation. Member checking is conducted to strengthen data validity in qualitative research (Motulsky, 2021; Naidu & Prose, 2018).

Four external qualitative researchers (health systems strengthening specialists, who were two Black people and two White people) were invited to comment on our data interpretation (Lee, 2014; Liao & Hitchcock, 2018). Disagreements were resolved through open discussions until a consensus was reached, and this added rigor to our data analysis. The inclusion of two White people was to minimize any biased effect of insider status (Merton, 1972). To enhance transparency and validity, our study followed the consolidated criteria for reporting qualitative health research (COREQ; Booth et al., 2014).

Findings

Our findings were guided by, and presented according to, our research questions.

What Inequalities in Healthcare Systems Do Black People in the USA and the UK Face that Hinder them from COVID-19 Vaccination?

No Perceived Inequality

Most USA participants (except one) and three UK participants narrated that there were no inequalities that hinder COVID-19 vaccination among them. For instance:

A USA participant narrated how COVID-19 vaccines are available to Black people in the same way that they are available to White people.

> "There were no inequalities experienced at all by me in getting vaccinated. Vaccines are available to Black people and are administered with all promptness and willingness, just as they are to any White person. I and all of my friends to the best of my knowledge experienced no discrimination. The government and the people did all they could have done." [Female, 47 years old, the USA]

Another participant narrated:

> "No limitations attached to COVID-19 vaccines in my country (the USA)" [Male, 48 years old, the USA]

Similarly, the UK participants narrated:

> "My ethnic identity doesn't hinder me in any way from getting vaccinated." [Female, 48 years old, the UK].

"There were no hindrances to getting vaccinated to the best of my knowledge." [Male, 48 years old, the UK]
"I am not aware of any health policies that hinder COVID-19 vaccination among Black people in the UK." [Female, 54 years old, the UK]

Mistrust of the Healthcare System

However, many (about 18) UK participants narrated their mistrust of various aspects of the healthcare system and linked this to inequalities that hinder COVID-19 vaccination.

"There are inequalities throughout the UK and the National Health Service (NHS) system. Lack of trust for the UK health system, and lack of honesty from the UK, are all enough reasons for me not to get vaccinated" [Female, 21 years old, the UK].
"I really do not fully understand why Black people are not vaccinated. I do believe previous poor experience with healthcare systems and lack of trust of healthcare professionals may all play a part." [Female, 52 years old, the UK]

More participants narrated:

"I am vaccinated because I am an NHS worker. However, if I wasn't an NHS worker, I'd be more likely to not get vaccinated because of Black British culture of not trusting health professionals." [Female, 25 years old, the UK]
"I won't say health policies are hindering COVID-19 vaccination; rather, I would say we are hindered by cultural factors, such as Black people's mistrust in health systems." [Male, 58 years old, the UK].

Participants narrated fears about COVID-19 vaccines being tested with largely non-Black populations. This was narrated as a source of mistrust of the healthcare system. It was also reported that gaps may still exist about how COVID-19 vaccines may affect ethnic minorities.

"I believe not getting vaccinated is due to a variety of reasons. However, to answer specifically to my ethnic identity, I am doubtful of the health system because I fear that COVID-19 vaccines may have been tested with largely a non-Black population and, therefore, there may still be gaps about how the vaccines may affect ethnic minorities." [Male, 28 years old, the UK]

Participants also doubted the speed with which COVID-19 vaccines were produced.

"It was mostly the speed which they came out with the vaccines that make me doubt the healthcare system a lot" [Female, 24 years old, the UK]

Health Policies

Health policies regarding COVID-19 vaccination were also highlighted among many UK participants and one USA participant.

"COVID-19 vaccination policies have no consideration on cultural differences and religious differences." [Female, 28 years old, the UK]
"Policies regarding COVID-19 vaccination appear to be threatening and this limits me from getting vaccinated" [Male, 46 years old, the UK]

More participants narrated:

"In current health policies regarding COVID-19 vaccination, there is a lack of culturally sensitive information which encourages vaccination. Also, I believe that people need to make the choice to get vaccinated for themselves, but, with current policies, it feels that there is an increasing pressure to vaccinate which does not allow people to have autonomy over their choice–for example, all NHS staff in the UK have to be vaccinated by March 2022, or they may not continue working." [Female, 30 years old, the UK]
"Lack of universal healthcare system delivery policy and high cost of health care services by third party health agencies are hindrances." [Male, 48 years old, the USA]

Health policies regarding Black immigrants were also highlighted by participants. For instance:

"Until August 2021, Black immigrants who did not have free access to national health services did not have access to COVID-19 vaccines." [Female, 41 years old, the UK].

Historical Factors

Many participants (only UK participants) narrated the role of historical factors, such as historical abuse within medicine.

"The healthcare systems are yet to invest in repairing relationships with Black and racialized communities in regards to historical injustices within medicine." [Female, 30 years old, the UK]
"In a way, I think we (Black people) are not getting vaccinated because this may probably have to do with the history of how in the past we were used as experiments. Also, historically, Black people are most likely to get sickle cell, diabetes, etc. So, who knows if these vaccinations will have unpleasant effects on our bodies in the future?" [Female, 22 years old, the UK]

Historical abuse of Black bodies by health professionals was highlighted among participants.

"Historical abuse of Black bodies by health professionals caused me to fear the potential of being harmed by COVID-19 vaccines, which caused me to delay uptake." [Female, 41 years old, the UK]

Scientists' intentions to send COVID-19 vaccines to Africa to test efficacy and safety on the poor to benefit the wealthy were also highlighted, and this reminded participants of historical abuses within health care.

"At the start of the pandemic, there were reports about some scientists' intentions to send vaccines to Africa to test efficacy and safety issues on 'the poor to benefit the wealthy.' This view was challenged by the WHO but it has lasting implications on me and my community to receive the vaccines as it reminds me of historical abuses within health care." [Female, 41 years old, the UK]

Residential Location

Participants (some UK participants and one USA participant) narrated how residential location played a role in hindering COVID-19 vaccination.

"I had fairly promptly received the NHS vaccination/booster message alert twice. This may have been given my residential location. Meaning that, depending on residential locations, we may be hindered from COVID-19 vaccination." [Female, 24 years old, the UK]

Another one highlighted:

"The COVID-19 vaccination awareness campaign was a bit slow or delayed in Black communities/residences. The roll-out of the COVID-19 vaccines to Black neighborhoods and the acceptance of these vaccines among the Blacks has been a limitation" [Male, 48 years old, the USA]

Dissatisfaction with Health Services

Some participants (only UK participants) expressed dissatisfaction with health services and linked this to inequalities that hinder COVID-19 vaccination.

"If my vaccination status has to do with race or not, I'm not sure, but my contact with healthcare when I tested positive was unpleasant. I was told there is nothing they could do to support me (perhaps they said this to me because of my race or because I was positive to COVID, I don't know). So, I am not vaccinated because of my dissatisfaction with health services." [Female, 36 years old, the UK]
"The fact that there is a lack of health care for Black people in the same way health care is given to people who are not of ethnic minorities. This causes dissatisfaction and hinders COVID-19 vaccination." [Female, 21 years old, the UK]

Experiences with doctors were highlighted by participants to support this theme.

"I am worried about my negative experiences with health care. I sometimes feel like whenever I am seen by the doctors, they rush their assessment on me because I am Black. This makes me feel like I didn't get a thorough assessment, which means my symptoms get worse. I am worried that the vaccination might do problems to my body that I am not aware of, and the doctors may not give me the best health care if this happens. So, this limits me from getting vaccinated." [Female, 22 years old, the UK]

What Efforts Must Governments Implement to Correct These Inequalities?

Acknowledgements

As most USA participants narrated that no perceived inequalities hindered COVID-19 vaccination for them, most UK participants and one USA participant narrated efforts that governments must implement to correct the perceived inequalities.

Most participants highlighted the need to acknowledge ethnic minorities, including Black people and members of other ethnic minority groups.

> "Governments should invest in understanding mental mistrust and how it presents in health care and medical education so that doctors, nurses, and practitioners are aware of some of the historical injustices. Additionally, healthcare systems must confront their racism and acknowledge how it impacts Black and racialized communities' access to and engagement in care in the long-term." [Female, 30 years old, the UK]

The need to acknowledge Black people during health policy formulation and program planning was narrated.

> "Health insurance and health care management policies should be reviewed by the government in a way that it favors the low-income individual, majority of whom are Blacks." [Male, 48 years old, the USA]
> "Consider people as equal relative to race when planning programs. The very fact that you (the governments) are referring to Black versus White makes people reluctant to engage with health services because you have already put the discourse of othering just as it is in policies." [Male, 46 years old, the UK].
> "They (governments) need to take us seriously when looking at Black people. They need to also think about is this health policy okay for Black people to take because our health is different from our White counterparts as Black people are more likely to get health problems than our White counterparts." [Female, 22 years old, the UK]

The need to acknowledge Black people through communication was narrated.

> "Listening to this sector of the population (Black people) is imperative. I believe this will make them feel acknowledged and included during COVID-19 vaccination planning." [Female, 52 years old, the UK]
> "Care for Black people better and take them seriously when they/we share our symptoms." [Female, 21 years old, the UK]
> "I think the government can do more to communicate to ethnic minorities about the effects (or if any) of the vaccination on ethnic minorities." [Male, 28 years old, the UK]

Participants highlighted the need to acknowledge health inequalities and fund Black experts.

> "Government needs to start by acknowledging and addressing health inequalities, and start funding Black experts in the field to offer teaching sessions to

build confidence and trust in the benefits of the vaccines." [Female, 41 years old, the UK]

Participants also highlighted the need to stop negative narrations about Black people and members of other ethnic minority groups.

"Government needs to stop blaming the BAME (Black, Asian, and minority ethnic) community for the lack of compliance. Stop the negative narrative about us being a difficult group to reach. This will make us feel better acknowledged and recognized." [Female, 36 years old, the UK]

Community Engagement

Lastly, community engagement was recommended by some participants (only UK participants). Specifically, participants recommended the need to integrate cultural groups in the planning of health programs and the need for health promotion programs from ethnic minority groups themselves.

"More effort should be made to integrate cultural groups in the planning of health programs. If they (governments) do not wish to then there will continue to be inequalities …" [Male, 58 years old, the UK]
"Health promotion–better from ethnic minority groups themselves" [Male, 41 years old, the UK]

Community engagement through partnerships with religious organizations was also highlighted.

"… Governments should work actively with religious organizations on this issue." [Female, 28 years old, the UK]

Discussion

Intending to inform policies and programs for correcting inequalities in healthcare systems that hinder COVID-19 vaccination among Black people, this study utilizes qualitative data collection among Black people residing in the USA and the UK. This study has two research questions–(1) What inequalities in healthcare systems do Black people in the USA, and the UK face that hinder them from COVID-19 vaccination? (2) What efforts must governments implement to correct these inequalities?

We find that most USA participants (except one USA participant) and three UK participants narrated that no inequalities hinder them from receiving COVID-19 vaccines. The USA participants supporting this also narrated that COVID-19 vaccines are available to Black people and are administered with all promptness just as they are to any White person. Ethical considerations and fairness regarding COVID-19 vaccination are imperative (McClung et al., 2020; Nguyen et al., 2022). For this reason, COVID-19 vaccines must be fairly distributed to enable equal access. Researchers in the UK and Nigeria in a recent publication argued the need for an

equitable vaccination program regarding COVID-19 vaccination (Alaran et al., 2021). In a bid to enhance the World Health Organization's proposed framework for distributing COVID-19 vaccines, scholars in the USA, Argentina, Singapore, and the UK highlighted the importance of fair allocation regarding COVID-19 vaccines (Emanuel et al., 2021). Also, this provides support for the FCT, which suggests that when social inequalities are controlled, access to health services is enabled (Phelan & Link, 2013).

Contrarily, most UK participants and one USA participant narrated various inequalities that hinder COVID-19 vaccination among them. The first is mistrust of the healthcare system (narrated by only UK participants). Participants narrated their mistrust of various aspects of the healthcare system and linked this to inequalities that hinder COVID-19 vaccination. Mistrusts were also narrated through fears about the vaccines being tested with largely non-Black populations and the speed with which COVID-19 vaccines were produced. The co-authors of this paper in a recent study conducted among the UK and Nigerian residents found that people's mistrust and fear regarding COVID-19 vaccines were linked to COVID-19 vaccination (Ogueji & Okoloba, 2022). A recent quantitative study by scholars in Turkey found a significant association between trust in the healthcare system and COVID-19 vaccination (Turhan et al., 2021). Bazargan et al. (2021) suggested that further study is needed to understand the mistrust of healthcare systems. Therefore, as our study reveals a link between mistrust of the healthcare system and COVID-19 vaccination, we believe that our study contributes to a further understanding of the mistrust of healthcare systems.

Second, we find that health policies regarding COVID-19 vaccination were highlighted among many UK participants and one USA participant. Health policies regarding Black immigrants were also narrated by participants. A health policy paper emphasized that health policies play a role in ensuring a global distribution of COVID-19 vaccines (Wouters et al., 2021). A European survey including respondents from the UK, Germany, Denmark, the Netherlands, France, etc. emphasized that finding and using appropriate policies to support COVID-19 vaccination is imperative for COVID-19 vaccination planning (Neumann-Böhme et al., 2020).

Next is historical factors, highlighted by participants (only UK participants). These include historical abuse within medicine, historical abuse of Black bodies by health professionals, and scientists' intentions to send COVID-19 vaccines to Africa to test efficacy and safety on the poor to benefit the wealthy. Racial factors and related factors are linked to health-related outcomes according to the FCT (Phelan & Link, 2013). Our finding supports a study conducted among skilled nursing facility (SNF) staff in the USA (Berry et al., 2021). The study found that historical abuse of Black people was linked to COVID-19 vaccination among participants. Additionally, our finding complements a recent UK study that documented the role of racial injustice on COVID-19 vaccination (Woodhead et al., 2021).

Another finding is the residential location. Participants (some UK participants and one USA participant) narrated how residential location play a role in hindering COVID-19 vaccination. Specifically, UK participants reported that they promptly received COVID-19 vaccine availability messages from health service providers, and this may be due to their residential locations. This suggests that people may be

hindered from COVID-19 vaccination based on their residential locations. Further, a USA participant reported that the COVID-19 vaccination awareness campaign was a bit slow or delayed in Black communities/residences. Indeed, residential locations may play a role in access to COVID-19 vaccines among the general public (Carpio et al., 2021; Gatwood et al., 2021); however, targeted and fair approaches can ensure adequate coverage during distribution (Emanuel et al., 2021; McClung et al., 2020).

The next finding indicates dissatisfaction with health services as among the inequalities that hinder COVID-19 vaccination. Some participants (only UK participants) expressed dissatisfaction with health services based on their encounters with health workers and linked this to inequalities that hinder COVID-19 vaccination. Participants also narrated that there is a lack of health care for Black people in the same way health care is given to people who are not of ethnic minorities. This supports the argument of a cross-sectional mixed methods study (Hausmann et al., 2020). The study argued that healthcare experiences are associated with perceived racial discrimination, and this can limit people's utility of health services. This lends support to the FCT, which suggests an association between racial factors and inequalities in healthcare systems (Phelan & Link, 2013).

Based on our second research question, two themes are created– "acknowledgment" and "community engagement." The theme of acknowledgment reveals that participants need governments to acknowledge ethnic minorities, including Black people and members of other ethnic minority groups. Specifically, the need to acknowledge Black people during health policy formulation and program planning was narrated. Participants also narrated the need to acknowledge Black people through communication, the need to acknowledge health inequalities and fund Black experts, and the need to stop negative narrations about Black people and members of other ethnic minority groups. This supports the COVID-19 literature where the need to acknowledge or recognize ethnic minority groups was emphasized (e.g., Abuelgasim et al., 2020; Aldridge et al., 2020; Reyes, 2020; Yancy, 2020; Yaya et al., 2020).

The second theme, community engagement, reveals that participants recommend the need to integrate cultural groups in the planning of health programs regarding COVID-19 vaccination and the need for health promotion programs from ethnic minority groups themselves. Participants also recommend the need for community engagement through partnerships with religious organizations. This theme supports the importance of community engagement in COVID-19 vaccination program planning, which has been documented in the literature (Burgess et al., 2021; Kamal et al., 2021; Mondal, 2021; Nachega et al., 2021).

We believe that this study builds on Ogueji and Okoloba (2022) by reporting Black people's perceptions and experiences of inequalities in healthcare systems that hinder COVID-19 vaccination. However, this study has a limitation. The selection bias suggests that our data may not reflect the narratives of the digitally excluded Black groups in the USA and the UK. Hence, future research needs to document the narratives of these groups.

Implications for Healthcare Systems and COVID-19 Vaccination Program Planning

With a unique focus on Black people in two very different regions and contexts (the USA and the UK), this study deepens our understanding of inequalities and how they determine access to COVID-19 vaccines. Based on the findings, we highlight the following implications. First, the control of social inequalities, which have been done to enable fair access to COVID-19 vaccines, should be maintained or strengthened by governments. Second, mistrust regarding COVID-19 vaccines should be addressed through honest communications about COVID-19 vaccines and their benefit to people from different ethnic backgrounds. Third, health policies regarding COVID-19 vaccination should be fair and should have cultural and religious sensitivity.

Fourth, historical abuse of Black people should be considered during the formulation of health policies regarding COVID-19 vaccines and COVID-19 vaccination program planning. For instance, Black communities' experiences of historical abuses should be respected and the Black communities should be assured/re-assured that COVID-19 vaccination is not a disguised abuse of Black communities. Fifth, residential locations should be considered during COVID-19 vaccination program planning. For instance, the planning should ensure that COVID-19 vaccines are fairly distributed across every residential location. Sixth, Black people and people from other ethnic minority groups should be cared for in the same way that White people are cared for to address the dissatisfaction with health services. Last, Black communities should be acknowledged and community engagement through partnerships with Black communities and religious organizations should be considered during COVID-19 vaccination program planning.

Conclusion

As far as we know, our study, an international collaboration, is the first to provide comprehensive findings on Black people's narratives regarding inequalities in healthcare systems that hinder COVID-19 vaccination. Our study is also the first to provide participant-informed recommendations that governments must implement to correct these inequalities. This is because specific studies addressing this topic were lacking in the COVID-19 literature at the time this paper was written.

The present study shows that Black people have various perceptions and experiences of inequalities in healthcare systems that hinder COVID-19 vaccination. These include mistrust of the healthcare system, health policies, historical factors, residential location, and dissatisfaction with health services. In terms of what governments must do to correct these, participants recommend the need for acknowledgment and community engagement.

Based on these findings, implications for healthcare systems and COVID-19 vaccination program planning are presented above. These implications will assist

governments in planning and sustaining fair delivery of COVID-19 vaccines across the Black ethnic minority group. Thus, we believe that, through these implications, access to essential medicines and vaccines, which is among the building blocks of healthcare systems, will be strengthened.Finally, there are members of other minority groups and vulnerable communities who are not Black people. Such groups could face unique inequalities that hinder COVID-19 vaccination. Therefore, future studies should include such groups.

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Author Contribution Ogueji conceived the study and invited the co-authors for a collaboration. Ogueji, Okoloba, and Maloba contributed to the study design and data collection. All authors contributed to the data analysis, interpretation of findings, manuscript writing, and revision of the manuscript. All authors read and approved the final version. This paper is a collaboration among committed professionals who are not sponsored by any agency or institution.

Data Availability The data associated with this study are available from the corresponding author upon request.

Declarations

Ethics Approval Our study was in accordance with the ethical standards of the institutional and/or national research and ethics committee, the 1964 Helsinki ethical declaration, its later amendment, or a comparable standard. This study adhered to the American Psychological Association (APA) and the British Psychological Society (BPS) Code of Human Research Ethics.

Consent to Participate An online consent form was utilized to obtain consent from every participant before data collection.

Consent for Publication All participants consented that findings from their data should be published in this paper.

Conflict of Interest The authors declare no competing interests.

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