Examining the role of community champions to promote vaccine uptake in under-served communities in the United Kingdom: Lessons from the COVID-19 pandemic

Abstract

The COVID-19 pandemic has highlighted how ethnic minority groups are disproportionally affected by health crises and the need for community engagement to provide equitable public health information and services. Policymakers, practitioners, and academics have presented community engagement as a way to improve access and uptake of health services, including vaccination, but the role of community members and leaders for health promotion is rarely questioned. We examine the role of 'community vaccine champions', who have been acting as advocates, promoting engagement among ethnic minority groups for COVID-19 vaccination in different communities across the United Kingdom. Our research explores how champions working with minoritised groups have experienced and confronted the challenges brought on by the pandemic. Participants were invited to participate in this study as they worked with or for the Black or South Asian community (i.e., community leader, faith leader, or a public or allied health professional) and were working or had worked to increase COVID-19 vaccine uptake in their communities. From April 2021 until May 2022, we conducted 12 semi-structured interviews lasting 45-60 minutes via video call. The interviews were inductively coded and analysed following a discourse approach to health communication, where a focus is made to draw out underlying messages and talking points.

Our findings highlighted the range of different types of champions, who have a variety of roles within their respective community groups. Champions proved adaptive in taking on new positions to promote vaccination, with limited training and preparation, and found that being 'grassroots' actors positioned them well to both address local needs and to help build trust between authorities and their own communities. A major challenge that champions found was the use of ethnic minority classifications and how to address misinformation. Classifications were seen as a problem in how relevant data was collected, as well as in assigning blame to certain groups. Champions discussed the influence of media and social media misinformation on vaccine decision-making, especially on ethnic minority groups. Still, our informants cautioned taking action based on simplistic assumptions about how misinformation negatively affects vaccine uptake. We conclude by setting out the need for ongoing community support for health issues and how data collection, matters in a pandemic setting.

(400 words)

Keywords: community engagement, vaccine champions, COVID-19 pandemic, ethnic minorities, misinformation

Introduction

During the COVID-19 pandemic, unequal vaccine coverage across ethnic groups was a key concern. Gaughan et al. (2022) found disparity in comparing the vaccination rate of the white British population receiving at least one vaccine dose at 94% (95% CI: 94%–94%), compared with a lower vaccination uptake from more deprived black African 75% (74–75%) and black Caribbean 66% (66–67%) individuals living in urban environments. While they explain that sociodemographic differences were a reason for lower rates, modelled estimates still showed significant differences for all minority ethnic groups when compared with white British individuals. It was clear that some communities were lagging behind in their vaccine uptake and action was needed to address such disparities. Community champions have been utilised in the past to promote health and wellbeing or improve conditions in their local community and were more recently used to promote COVID-19 vaccine uptake among ethnic minority groups. Community champions, as volunteers from local communities, were deployed to improve communication and build trust, by sharing accurate and tailored COVID-19 vaccine advice and health information, as well as tackling misinformation (Public Health England, 2021). Misinformation has been often concentrated on by authorities for clarification and better information, rather than disinformation, which is the intentional deceiving and misleading of audiences. The rationale for using community champions during COVID-19 vaccine campaigns was to boost local vaccination take-up, building on existing activities and expanding networks of local champions. However, there is a longer history to the community champion role, rooted in a legacy of volunteering for health promotion, which we explore in the next section. Such volunteers have long supported health promotion in the United Kingdom (UK), with their roles becoming more formalised and diversified since the inception of the National Health Service (NHS) in 1948 (Collyer Merritt, 2020; Crane, 2018; Rawlings, 2012).

Role of community champions

Today, within the NHS, volunteers support diverse groups, disease areas and services, from hospital-based Dementia Champions in Scotland (Banks et al., 2014; Crabtree & Mack, 2010) to community health volunteers engaging communities around cardiovascular disease interventions across England (Nahar et al., 2020; Woringer et al., 2017). In the UK volunteer community, wellbeing and health champions come in many guises, embedded both in the NHS and in local authorities (Brent Council, 2021; Nazar et al., 2016; Woodall et al., 2013), while others are rooted in faith communities (Codjoe et al., 2021; Fagan et al., 2010, 2012) and the voluntary sector (Brown et al., 2020; Carter et al., 2022; Coram Family & Childcare, 2017; Godfrey et al., 2013). For the 'NHS at 70' project in 2018, commissioned researchers recruited and trained more than 150 community-based volunteers as history champions to record the institution's first 70 years (Snow & Whitecross, 2022). Community champions have evolved in parallel with a more holistic approach to community health and wellbeing, drawing on the successful activation of volunteers through park runs, community gardening, nature conservation and the collective improvement of greenspaces to benefit public health (Currie et al., 2016; Fullagar et al., 2020; Hobbs & White, 2015; Lehman et al., 2020; Ramsden, 2021). In Scotland, for example, some research has positioned such community volunteer programmes as 'pathways to social prescribing', with the recommendation of community leaders, from politicians to healthcare workers to serve as 'Green Health Champions' (McHale et al. 2020).

In their recent rapid review of related literature, Public Health England (now the UK Health Security Agency) defined community champions as "community members who volunteer to promote health and wellbeing or improve conditions in their local community", stating that the term was interchangeable with 'health champions' (Public Health England, 2021, p.3). Embedded in communities, champions leverage their social capital "to address barriers to engagement" and improve access to services for "disadvantaged communities" (ibid.). Community champions are thus

part of a wider movement in public engagement and patient involvement in research and health service design to recognise the value of lived experience (Holmes et al., 2019; Rathod et al., 2021), with the aim of informing better policies and delivery of healthcare services (such as vaccination) (Ames et al., 2017; Holmes et al., 2019).

In the UK the specific health focus of community champions has become a more entrenched role than for other topics. However, we have seen that community champions supporting health promotion are not always described as such in the literature or in real-life settings. There are also parallel roles with a similar ethos, which has meant community champions have not always been seen to have the distinct role that has become more apparent since the COVID-19 pandemic. These parallel roles include community health volunteers (Woringer et al., 2017), community health champions (Royal Society for Public Health, 2015; Woodall et al., 2013), healthy living champions (Nazar et al., 2016; Rutter & Vryaparj, 2014), volunteer and peer supporters and advocates (Hood et al., 2015; Howlett et al., 2021; Pryce et al., 2015; Rathod et al., 2021), and lay health workers (Carrera et al., 2018; South et al., 2014). Community-embedded volunteers have also facilitated citizen science and deliberative initiatives to inform health policy (Degeling et al., 2017; Lehman et al., 2020), acting as health research champions (Oduola et al., 2017) or participating in action research to better design community-based health services (Farmer et al., 2015; Farmer & Nimegeer, 2014; Fullagar et al., 2020). Some peer supporters and lay health workers may be paid or may involve the private sector, blurring the boundaries between volunteer and salaried roles (South et al., 2014). For example, pharmacies also play an increasingly pivotal role in community-based health promotion, typically via support staff who train as healthy living champions across the national network (Nazar et al., 2016; Rutter & Vryaparj, 2014). As such, community pharmacies became a central pillar of the COVID-19 vaccine rollout, alongside General Practitioners (GPs) and mass vaccination centres (House of Commons Committee of Public Accounts, 2022). In some communities, local residents themselves receive training to become community health champions to volunteer to participate in activities expanding the uptake of 'healthy living initiatives' (Royal Society for Public Health, 2015).

A number of community champion initiatives that have not been specifically health-focused were developed in partnership with third-sector organisations, such as 'The Parent Champions National Network', which remains active chiefly across England and Wales (Coram Family & Childcare, 2017). The parent champions programme is a surviving example of the 'collaborative governance' model championed by the Labour government (1997-2010) to promote peer-to-peer, local authority, and other community-based organisations coming together to improve access to and tailoring of local services (Chapman et al., 2010). Volunteers arguably became even more prominent with the political context changes precipitated by Prime Minister David Cameron's coalition government and its emphasis on the 'Big Society' expanding to fill the space left by austerity and a shrinking state (Chapman et al., 2010; Hussein & Manthorpe, 2014; Warren & Garthwaite, 2015). A general reflection of the proliferation if these rypes of roles has been increasing concern about the over-reliance on volunteers, such as community health champions as a cost-saving measure, with volunteers facing the same expectations as paid staff (South et al., 2014; Warren & Garthwaite, 2015). A modelling study by Hayhoe et al (2018) estimated that a nationally scaled workforce of voluntary community health workers would cost the NHS over £3.3 billion annually to employ.

Vaccination programmes and volunteering

There is a need to better understand the part played by the variety of community actors in health and the promotion of vaccines, especially seeing as this type of community engagement aimed at addressing inequalities is increasingly presented by policymakers, practitioners and academics as a way to improve access and uptake of health services, including vaccination (see Nahar et al., 2020; SAGE Ethnicity Sub-Group, 2020; Taylor et al., 2019; Woodall et al., 2013). The activities of community

champions to promote vaccination is not new. Volunteers directly coming from the communities they aim to serve, have long been central to successful vaccination programmes, with involvement stretching from the participants in vaccine trials to the administration of vaccines (Frampton and Shuttleworth 2016). Still, the increased mobilisation of community champions came when in January 2021 the UK government recentred its 'Community Champions Scheme' to support the COVID-19 vaccine roll-out to under-served communities, dedicating £23.75 million in funding to 60 councils and voluntary organisations across England (GOV.UK 2021). The Community Champion Scheme funding was focused on "areas with plans to reach groups such as older people, disabled people, and people from ethnic minority backgrounds" who were under-served and worst affected by the novel virus (ibid.). 'Under-served' is the preferred term in government to refer to members of the community who have lower inclusion in aspects of public life and services through no fault of their own, with a lack of attention and differences in response or engagement within healthcare research (Witham et al. 2020). The concentration was on communication, building trust, and supporting the 'at-risk' groups to share accurate and tailored COVID-19 vaccine advice and health information as well as tackling misinformation (GOV.UK 2021). Such an overall aim to boost local vaccination take-up sought the outcome of helping to 'save lives' via networks of local champions and building activities to challenge some of the barriers that these communities might experience. Community grassroots organisations were encouraged to develop their own plans, with activities envisioned as being for example, vaccine buses, vaccination in the community, helplines, school programmes, workplace engagement, phoning those in at-risk groups, as well as training sessions to help people provide information and advice (ibid.). The use of phones to reach communities that might be digitally excluded was also recommended to link them to wider services, such as GP surgeries and vaccine centres. Local newspaper coverage during and after the pandemic highlighted the community interest in the diverse activities of champions:

> *South Shields FC sign up as covid community champions to help fight virus in South Tyneside* (The Shields Gazette 2021)
>
> *Oldham's Community Champions credited for vaccine uptake boost* (The Oldham Times 2022)
>
> *Walk-in mobile vaccination service comes to Littlehampton for Covid-19 autumn booster programme* (Sussex World 2023)

Local communities had free reign in how they tackled the issue of undervaccination, with the South Tyneside community for example signing up their football club as community champions (The Shields Gazette 2021). These community engagement activities and interventions that aimed to improve COVID-19 vaccine uptake should also be viewed against falling vaccination rates more generally. For example, in 2019, the UK lost its measles-free status after recording its sixth annual decline in childhood immunisation rates (Screening & Immunisations Team & NHS Digital COVER Team, 2019; World Health Organization, 2019). This backdrop of declining immunisation has also been accompanied by increased awareness of health inequities, including calls for greater consideration of issues affecting black and minority ethnic groups.

Additionally, what is commonly referred to as Black, Asian, and Minority Ethnic (BAME) communities have been the focus of health promotion volunteering programmes, often in collaboration with religious and community groups, to act as mechanisms intended to better enable authorities to connect with and tailor support (Brown et al., 2020; Fagan et al., 2010, 2012; Howlett et al., 2021; Rayment et al., 2016). In turn, research exploring barriers to conducting health research in BAME communities has recommended the deployment of community champions as a solution (Hood et al., 2015). Better engaging at-risk BAME communities was central to the mission of vaccine community champions during the COVID-19 pandemic (Academy of Medical Sciences, 2021; Brent Council, 2021;

Kasstan et al., 2022). Champions sought to uncover and challenge myths about vaccination and build trust in their communities. In some local authorities, champions shared information from the NHS with local residents via WhatsApp, and produced and posted videos of community leaders providing verified information about vaccines via social media (Sussex Health & Care Partnership. 2021).

Community champion programmes predated the pandemic but champions often had broader roles, for example focusing on addressing health inequalities (Brent Council, 2021; Public Health England, 2021). However, in response to the COVID-19 pandemic, the case was made for vaccination counsellors to be trained and rolled out across healthcare systems to support individual vaccine decision-making (Ulrich et al 2022). These initiatives were scaled up as a key mechanism to reach communities at the height of the pandemic, with a priority focus being vaccine community champions. COVID-19 has highlighted both how ethnic minority groups have been disproportionally affected (Dowrick et al., 2022; Mackey et al., 2021; Rasheed et al., 2021), but also the need for community engagement to provide equitable public health information and services (Kadambari & Vanderslott, 2021; Kasstan et al., 2022). In this role, volunteers across the UK (but predominantly in England) faced additional challenges brought on by the pandemic.

Evaluations have already taken place to assess the success of community champion programmes. The Department for Levelling Up, Housing and Communities commissioned an evaluation report about Community Vaccine Champions with IFF Research that was published in July 2023. The report encompassed ten case studies of local authorities: Boston, Bristol, Cambridge, Hammersmith & Fulham, Kensington & Chelsea, Westminster (Kensington and Chelsea was grouped as one case study area), Lancaster, Newham, Oxford, Sandwell, and Wolverhampton. This evaluation employed a qualitative and quantitative approach. The quantitative approach involved a resident survey in case study areas (750 responses) and matched comparison areas (745 responses), with an analysis of vaccine statistics and value for money assessment. The qualitative approach included interviews (10 with local authority leads, 27 with delivery and health partners), and focus groups or interviews (8 with those involved in grassroots delivery). A key finding was that while there were no significant impacts on vaccination uptake, when looking at sub-groups there was a significant positive impact on COVID-19 vaccine boosters for religious minorities. In a press release, the Communities Minister Kemi Badenoch MP emphasised how the mobilisation of volunteers was akin to an 'army' to improve vaccine uptake, with their value lying in them being 'at the heart of their communities':

> *"In England more than 80% of eligible adults over 18 have had a booster and for over 50s it is 90%. This is a great take-up so far, but we need to do more as we know that the unvaccinated are up to eight times more likely to be hospitalised than those who are jabbed. By funding Community Vaccine Champions – an army of volunteers who are at the heart of their communities - we can reach those yet to be vaccinated and encourage them to protect themselves and the NHS."*(GOV.UK 2022)

In addition, an earlier spotlight evaluation had been commissioned (Kamal and Bear 2021), using longitudinal qualitative research and was conducted by researchers at London School of Economics and Political Science, covering three regions (a medium size density region with one major town, a large district with several towns, and a medium sized density town). As a result of the evaluation, the researchers identified principles of effective community engagement and policy success that they saw as underpinning the success of the Community Champions programme. Overall, the evaluation praised a "rapid policy response directed through existing skilled local networks with micro-knowledge of barriers and needs" with the suggestion that "now this social infrastructure of Community Champions has been built, it is very important to continue central government support for it as it has the potential to be deployed to support a wide range of public health and social cohesion initiatives" (Kamal and Bear 2021, p.26). There has also been some celebration of success, such as in Oldham,

where community champions were thanked for boosting COVID-19 vaccine uptake across the borough through a celebration event. As Laura Windsor-Welsh, the strategic locality lead for Action Together in Oldham stated: "I can't say enough how vital the Community Champions have been in our efforts to keep people safe from Covid. They've given up their time to be advocates in their communities and have had a massive impact. It's been a pleasure to have this great network of people develop over the two years (The Oldham Times 2022). These evaluations and reflections of the programme have therefore hightlghted both the impact of the programme and the importance of principles for effective community engagement that it was built upon. Our research aims to broaden the assessment of community champions to concentrate on how the role was understood and experienced by the champions themselves, including the challenges and barriers faced.

Methods

Participants and recruitment

This study received formal ethics approval from the Research Ethics Board of [blinded for review]. Participants were invited to participate in this study as they worked with or for the Black or South Asian community (i.e., community leader, faith leader, or allied health professional) and were working or had worked to increase COVID-19 vaccine uptake in their communities. The way that the UK community champion policy was structured provided a wide scope for implementation with local authorities and community groups for how best to put in place interventions involving champions. Therefore, the interpretation of what it meant to be a champion was left very much with the interpretation and agency of communities. This translation of policy intention and how the champion roles and responsibilities were put in place was the focus of our primary data collection, as there is currently a lack of data on the community champions themselves.

Participants were recruited to the study based on the personal contacts and networks of the research team, particularly those developed as part of previous COVID-19 studies (Kadambari and Vanderslott 2021a; Vandrevala et al. 2023). From April 2021 until May 2022, we conducted 12 semi-structured interviews lasting 45-60 minutes via videocall. A first researcher (LA), a health psychologist undertook nine interviews. A second researcher (SV) undertook three more interviews to increase the geographic representation of the community organisations. These final participants were recruited via a community engagement project about COVID-19 vaccination (Kadambari and Vanderslott 2021a). We outline the biographies of the community champions in table 1 below, detailing the context in which they worked, while taking steps to deidentify their personal data. The champions we interviewed were all already closely involved in their local communities but during COVID-19 had stepped forward to promote vaccination and assist in the rollout of vaccines. We sought to develop an understanding of the community leader role and what enabled them to effectively use their position to influence vaccine uptake within their communities, along with any barriers experienced. Furthermore, we aimed to examine community champions' perceptions of the specific mechanisms, including positioning, appeals, methods, and actions, which enabled them to successfully address the issue of undervaccination both during the pandemic but also more generally.

Table 1 Community champion biographies

CC1 works in public health for a non-governmental organisation (NGO) with global outreach, talking about vaccines with black communities in the UK. They speak about why it is important to have community champions and try to understand the reasons why people might be hesitant. They feel that people trust them because they work in public health and are from both the West African and Caribbean communities, and, having grown up in the UK and understand what it is like to be a minority. CC1 sees a lot of hesitation about not being able to trust the government and authority.

CC2 is in contact with people with diabetes, which is considered a vulnerable group for COVID-19. As people from minority ethnic groups are more likely to develop type 2 diabetes, CC2 sees lots of people from these groups. In addition, they work for a health foundation focused on a specific ethnic minority group.
CC3 is from the Tamil community. Since retirement CC3 has become politically active and has become involved in many community organisations, supporting Tamil communities. In addition, CC3 works for an organisation which seeks to increase diversity in art.
CC4 is a medical professional. As part of their work, they interact with diverse groups, in terms of ethnicity and socio-economic status, but also in terms of excluded population groups, such as asylum-seekers, refugees, people without documentation, sex workers, people experiencing homelessness, and Gypsy Roma traveller communities.
CC5 works for an organisation which seeks to improve the lives of undocumented migrants. This community primarily consists of undocumented or irregularised migrants or people living in the UK, some for a long time. CC5 does community outreach and media work as well as networking and interacting with other organisations that are working on similar issues or communities as well as with the media.
CC6 spoke at a workshop in the Black African community, which was a forum for the community to talk, including about issues such as COVID-19 vaccine hesitancy. CC6 was initially sceptical of vaccines, believing in conspiracy theories that Bill Gates wanted to kill black people. CC6 has since changed their views and is now worried about a lack of education about vaccination in her community, believing that is important to speak about being vaccinated and feeling well after it.
CC7 is from a diverse city in England, where the ethnic minority community make-up is predominantly South Asian, with some Middle Eastern communities, a small African community and a growing or emerging Eastern European community. They also work with people who are asylum seekers and refugees, as well as with other community organisations that work with these groups.
CC8 works with local government and in the community as a member of their local Muslim Association. They keep in touch with other members of the Association via social media and are connected with large mosques in the area.
CC9 is part of an organisation that aims to improve the quality of life of the minority ethnic community in a London borough, which serves predominantly Asian community members over 50, more typically with females than males, and people who are classed as under-served or marginalised.
CC10 has worked at a charity focused on asylum seekers and refugees for over 20 years and works with community leaders, individuals, families, and other charity partner organisations.
CC11 works for a membership organisation for ethnic minority groups in Scotland. During the pandemic, C11 co-ordinated a network of over 100 community organisations, academics, NGOs, government officials, local government, and public health, on issues affecting ethnic minority groups that arose during the pandemic, one of which was vaccination.
CC12 works with a network which supports black and minority ethnic voluntary and community organisations. CC12 supports the community by making connections, informing, and enabling community empowerment and engagement.

Data collection and analysis

Interviews were conducted either online (via Microsoft Teams or Skype) or via phone, depending on the participant's preference. All interviews were conducted by researchers LA and SV and ranged in length from 25 to 46 minutes (mean time = 34 minutes). Interviewees provided written informed consent prior to their participation. The interviews were semi-structured, with questions covering the following topics: (1) the community in which they worked and the people living there; (2) attitudes

towards COVID-19 vaccination in their community; (3) sources of trusted health information in their community; (4) their role promoting COVID-19 vaccination; and (5) their views on effective messaging on COVID-19 vaccination.

Interviews were audio recorded and transcribed verbatim using a digital transcription service. Transcripts were then checked for accuracy by the research team who were trained in qualitative research methods. We have employed pseudonyms to protect the identity of interviewees. Data were analysed, beginning with familiarisation with the transcripts, which were then coded inductively using NVivo1.7.1. The coding aimed to identify key themes, with one author (SV) generating the initial codes for each transcript and developing an overarching codebook. The codebook was shared with the entire team for comment. A second author (KJ-B) then reviewed and compared the codes, making suggestions for changes. Following a meeting with the research team to address queries we recoded and added additional codes where necessary. We took a discourse approach to health communication in our analysis (Yazdannik, Yousefy, and Mohammadi 2017), paying attention to how language was used and how this related to particular sociocultural contexts and power relations, with the aim of uncovering underlying messages and talking points. In inductively coding and analysing the interviews we discussed codes and emerging themes with the research team in subsequent meetings.

Results

We examined a range of different types of champions, with a variety of roles that they took on within the differing community groups that they served. Champions critically reflected on: (1) the community champion role – how they understood that label themselves and how others saw them; (2) the targeting of communities to address local needs and concerns (e.g., migrants, clinically vulnerable, religious groups); (3) combating mistrust in the community; (4) the use of ethnic minority classifications and the implications of this; (5) challenging misinformation in promoting vaccination. These themes will now be discussed in turn and we then situate these reflections within a wider context for understanding the community champion role in the discussion.

(1) The community champion role – reflecting on the label

Participants reflected on their roles as community champions. The vaccine focus of their roles was described as new, and champions reported having received little specific training for this often additional requirement. Generally, the role was leveraging their existing trusted place in the community (e.g., as a medical professional) rather than conferring any leadership position. Nearly all of the champions had existing roles within the local community, which might also include input into local government through 'Local Strategic Partnerships', akin to a strategic board on a council that comprises members of different community organisations. Many champions reported increasing their focus on health and wellbeing as part of the pandemic response, and as a strategic pivot in response to the multiple challenges presented by COVID-19. For example, while CC9 previously concentrated more on cultural and social cohesion to address issues such as terrorism, they noticed that multiple issues began to be approached through public health thinking: "*Even with youth violence, domestic violence, and all sorts of things like that, that became being seen through a health lens*".

However, even though champions were often changing their normal activities within the community, the limited training was more informal and general:

> *"I had some guidance from the council comms team, the other people helped me with videos and the press interviews and things like that. But being more of the community organisations*

as a councillor, we had training in general, not just for COVID, but general training on how to promote things and so on. That certainly helped as well" (CC4).

Others suggested that training would be helpful but "*fire-fighting"* at the early stages of the pandemic made this difficult, which meant that in the end champions were *"organically trained*" (CC9). CC10 stated that a couple of hours of online training would have been useful. For CC8, training for champions could have also been specifically directed at GPs: "*I think we all need training on it because especially as GPs, we will be in a place that we're having these conversations, so I think it's really important to have training actually*". However, champions noted that they were able to adapt and evolve into the role, which also involved running training for other community members:

> "*We have started to deliver some training ourselves now through our health champions programme. So, we've now secured some funding through our CCG to deliver the community health champions programme. So, we are now delivering quite a lot of training around health checks and things like that. Funding mostly came from local government or the NHS through 'Clinical Commissioning Groups'* (CCGs)" (CC9).

Champions expressed how helpful they saw their positions for promoting trust in vaccines. CC2 suggested that their dual position as both doctor and community member placed them in a position of trust, expertise and respect that helped with being listened to and made them qualified to address key concerns regarding vaccine hesitancy:

> *"I think they trust me quite a lot because I have a respected position in society. I'm a doctor. I have the experience and knowledge and I can back what I say with evidence"* (CC2).

Similarly, as CC8 stated, when there was trust and rapport within their community, members of the public were comfortable asking questions about vaccination. They noted that trust came from being relatable to the target community, as *"certain members of various communities might trust someone that looks more like them"*. One champion who was also a local councillor saw themselves distinctly as a trusted leader, being elected and involved in the local community for many years, meaning that they had got to know their community well: *"…they tend to respect me and have faith in me. So, I think that's one of the reasons they look up to the community leaders. People trust me because of what I have done in the past for the communities*" (CC4). However, reflecting on the vaccine champion role, some of the interviewees did not clearly recognise themselves as leaders:

> *"I don't consider myself to be a leader, as such. I work with local government. I work in the community. And people know me and know me for my sincerity and integrity in what I do. And that I will not actually flout my responsibility. And whatever I say, I won't say it lightly. That's probably the most important thing"* (CC10).

Thus, the community champion role was adapted to be specifically a health champion role, for which champions did not receive formal training, which would have been difficult during the pandemic, although some noted that light-touch training or continuous training (e.g. for community leaders to have conversations with members of the public about health promotion for vaccine uptake) would be useful. The role did not position community champions as leaders; rather it built on and leveraged champions' existing status as trusted leaders in their communities ("*people…know me for my sincerity and integrity in what I do*" CC10).

(2) Targeting of communities – to address local needs and concerns

Some champions reported targeting very specific community groups to address local needs and concerns. A number of community champions worked with migrants – including asylum seekers and refugees – and stated that these groups were currently denied many other rights, and so had different questions about access to healthcare or experienced specific barriers to vaccinations. They discussed how migrants were worried and fearful about the immigration authorities knowing their whereabouts. They stated that the structural barrier was the main reason this specific community had difficulty getting vaccinated when they tried to register with GPs and were asked for proof of address or identification. Sometimes this was lacking, and other times people were fearful of showing it.

> *"…people living in this way with precarious migration status might not want to interact with the public body due to the hostile environment policies"* (CC10).

Other champions worked with ethnically diverse clinical populations that were at additional risk or considered a vulnerable group for COVID-19:

> *"Most days I am in contact with people with diabetes, which is considered as a vulnerable group. It's an independent risk factor for severe disease from COVID… Because people of minority ethnic groups are more likely to develop type 2 diabetes, so I see lots of people from ethnic minority groups as well"* (CC2).

CC2 saw it as their responsibility also to be vaccinated as a frontline healthcare worker, caring for those with diabetes.

Other champions were able to help their communities navigate particularly challenging religious reservations relating to vaccine uptake and signpost them to trustworthy and authentic sources of information that were considered credible. CC7 interacted with the local Muslim community but at the beginning of the pandemic noted:

> *"…there wasn't a big intake from the Somali community regarding the vaccination…I referred them to scholars. Because the Muslim Council of UK, they gave a fatwa saying basically that you're allowed to take the vaccine, it's halal to take it. So, that actually helped a lot so I referred them to this. There was a lot of discussions with people and I passed [on] what I know for sure. If I am not sure about anything else it is, don't quote me, I'm not an expert. Go find an expert and ask them. But this is the way you can get to the expert. This is A, B and C, this is the links, this is information where you've got the correct information. That's what I did."* (CC7).

Therefore, involving community organisations with different aims and target communities was important to reach under-served groups, for example, working with migrants, the clinically vulnerable, or religious groups.

(3) Combating mistrust related to inequality and discrimination

The social and political landscape covering issues of mistrust was brought up often by our community champions – particularly relating to mistrust of the government and other institutions. Some community champions linked the wider political climate to mistrust of authority, where movements such as 'Black Lives Matter' had prompted their communities to be more aware of inequalities within health and healthcare, to question the truthfulness of messages from the government. Many were concerned that the way the issues were discussed by politicians and media channels targeted, blamed and stigmatised their communities.

"In the beginning there was resistance… It comes from mistrust of the government. So, people say, oh, why do we have to take a vaccine? That's another thing the government is allowing us. And Muslims don't like the government, government also doesn't like Muslims. Islamophobia is a big thing obviously and they have numerous occasions where the government wasn't on their side… And secondly, do we actually trust anything the government says?" (CC7).

"There seems to be different rules for different people. There was this whole emphasis on, the BAME community is catching all of it and we need to do something with this lot first. This is coming from top-down. And this is a problem, because ultimately, it puts an emphasis on us that we're the problem as a community. And that's hugely incorrect. But it's a sentiment that when you compound it or interlace it with what's been going on with Black Lives Matter, when you look at the inequalities within health and healthcare that are blaringly coming out." (CC12).

Similarly, policies from other areas such as 'stop and search' in policing, which disproportionately targeted some groups, over many years fed into institutional mistrust. These personal experiences of the pandemic compounded people's pre-existing distrust of the government as well as the NHS:

"unprecedented concerns with this specific vaccine, but some communities already had a distrust...For example, the Gypsy Roma Traveller community, generally, has quite a distrust of healthcare providers anyway. And a lot of the distrust from the groups, as we know, comes from being discriminated against and historical distrust as well. So yes, I've definitely seen it before, but this is a new level of vaccine under confidence, I think. Yes, especially in the homeless population. We found it a lot doing outreach with them" (CC8).

Some champions stated that their community's attitude towards the COVID-19 vaccines was changeable and trust in the government and NHS had varied but was badly hit by historic injustices and poor treatment over a long period of time. Champions thus were well placed to address these embedded beliefs due to their shared history with the communities they operate within.

"So, this government has come from a place, I guess, where there's been a lot of suspicion towards the government and the NHS. There has been a lot of bad treatment around unequal access, health inequalities, and structural racism. So, facing all of that, that has led to years and years of loss of trust. And I think also being ethnic minorities, a lot of ethnic minorities that we've been in touch with believe that there is some political gain by politicians in keeping ethnic communities a bit lower than the indigenous communities. And so, I guess all this sort of suspicion and all that led to a lot of myths around how COVID came about in the first place" (CC9).

"I think we're closer to the issues, closer to the picture. We're grassroots. So, most of the community know us. They know we're just ordinary people trying to do some work. And I think we deal with the issues in a much more flexible way because we don't have the bureaucracy that public sector, statutory sector seem to have" (CC9).

Their unique position within the community allowed them to not only understand the perspective of their community but also to challenge and change the narrative and tailor the messages to reflect the values of the community. For example, CC7 understood this mistrust of the government within their community that was more trustful of the NHS and so was able to change the narrative to "protecting their health".

"I said to them, look, this is not [a] vaccine from the government, this is a vaccine for your health. And it is not only the government, forget about the government, the National Health Service is saying to you this is actually helping. It's not a cure, one, but it will help reduce the issues of you getting it, and even if you're getting it, it will reduce your symptoms. So, it is for your benefit to take it. And it was changing the perspective of the people, trying to tell them, look, don't think that way" (CC7).

Within the context of widespread distrust of the government, champions put forward effective local strategies concentrating on health and support of the NHS to address vaccine hesitancy. The co-ordination of trusted community-relevant figures and medical professionals with subject area expertise to raise awareness – which is described as being highly effective for increasing vaccine uptake among ethnic minority communities. Acting as role models themselves by being pro-vaccine they discussed and explained their decision-making to convince others.

"They were talking to people, they were having conversations, and that raised awareness. And then we were having conversations with people in the community level speaking to people. And if people would ask me, I led by example, so I took my vaccine in the beginning and that apparently made a difference too. Because my friends came along to me and they were, like, well, if you take the vaccine and you're okay and we know your integrity. We know where you stand in the community and we know you are a person of faith, you have a strong faith, then that makes that it's okay for me to take it. And a lot of my friends took it afterwards. I was really surprised how me taking the vaccine affected a lot of people" (CC7).

Government mistrust was acute and stemmed from a view of being treated unequally and discriminated against. This observation echoes research that racial and/or ethnic discrimination in medical settings impacted on COVID-19 vaccine uptake (Paul, Fancourt, and Razai 2022; Vandrevala et al. 2023, Ganguli-Mitra et al, 2022). However, champions were able to overcome mistrust by coming from a 'grassroots' position. From here they were able to directly address issues and lead by example by showing other community members that they were willing to be vaccinated and were fine as a result. Furthermore, they also coordinated other community figures to have conversations.

(4) The use of ethnic minority classifications – contesting generalisation

Before discussing champions' reflections on their roles, it is necessary to note here that participants critically reflected on how champions represented and acted for 'BAME' communities and the implications of this. Specifically, they described the BAME classification by government and other institutions associated with low vaccine uptake, as being a blanket generalisation applied to everyone. Classifications such as BAME were described as insufficient for responding "to the diversity or need with those groups, or very narrow interpretations of legal duties is taken" (CC5). Furthermore, the use of these classifications as the "default position to aggregate ethnicities into racial categories" (CC5), was linked by champions to the stigmatisation and blame experienced by people from ethnic minority communities. Champions viewed it as a failure of authorities to understand and appreciate the long-standing health inequalities and other cultural factors that might lead to barriers towards vaccine uptake as the following two excerpts typify.

"I've had people contact me directly and say, listen, in my community, there's a massive uptake. This idea that the ethnic minorities aren't doing it is really annoying me because it just feels like they're putting the blame on us. If you look at the numbers that aren't taking it

(vaccine), they're bigger than the BAME community itself. There's this idea of, why are they saying these things?" (CC12).

"We just get labelled as one, tarred with one brush, as they say. And I think there's a lack of respect, there's a lack of understanding of cultural needs within a community and there's lack of understanding. I think there's complexities around food poverty, loss of work, bereavement, that families are significantly being affected by directly, indirectly, that aren't being considered when these conversations happen" (CC12).

The use of ethnic minority classifications in the context of COVID-19 vaccination uptake therefore was described as a gross generalisation ("tarred with one brush") which does not correspond with the experiences of ethnic minority communities ("in my community, there's a massive uptake"). This practice was described as working to conceal and close off the possibility of addressing the complex structural factors which affect vaccination uptake ("complexities...that aren't being considered when these conversations happen"). Instead, multiple access issues with receiving childhood vaccinations were cited by our study participants, including fewer available appointments with health visitors and GPs since the COVID-19 pandemic, language barriers, and mistrust amongst asylum seekers registering with healthcare providers.

(5) Challenging misinformation – through community insight

In their roles to promote vaccination, champions described misinformation as a major problem for lack of vaccine confidence, especially concerning vaccine safety and side effects. Disinformation connected to conspiracy theories was also a problem but less commonly seen. As we have noted, the difference between misinformation and disinformation has mostly regarded intent, where disinformation is deliberate in how false and/or manipulated information is created and disseminated with the intention of deceiving and misleading audiences, while misinformation is the inadvertent spread of false information (Department for Digital and Great Britain, 2020).

The approach taken by community champions was to ensure that time was taken to explain and address concerns and to use an 'insider' perspective, which allowed their communities to discuss these issues of concern in a non-judgemental space:

"I think it's mainly mis and disinformation. There's concerns about the safety, but it's just not just misinformation, it's a lack of understanding. And I think that so then you have to spend time explaining, but it's often around safety of the vaccine, the side effects of the vaccine. Then there's some disinformation around fertility and choosing that it's something that's going to affect future populations or affect ethnic minorities, that type of thing. Some conspiracy, but not much" (CC2).

In response to addressing misinformation with the correct information, champions used community insight, including 'myth-busting', and creatively engaged with the community, via videos, infographics, and webinars. Resources used needed to be produced for the communities in question, and local in context, whereas using high-profile celebrity figures in videos was considered counterproductive.

"I personally feel, having a lot of those videos with community leaders whom people don't really know, or they're not their own community leaders, I think that can be counterproductive. Because it feels like you're just saying that, all ethnic minority people or everyone obviously likes this cricket player. So, let's use him to promote this. So, it can be a little bit patronising

> *sometimes. I don't know, maybe it must work for certain communities. But I feel like that kind of one size fits all method can be not working as well"* (CC8).

In contrast, people respected messages from their community and faith leaders as well other community members who they saw as looking after them and were well respected. Messages dispelling misinformation using faith leaders in the places of worship were considered compelling.

> *"We organised four vaccination events in the local mosque, it was really, really good because the faith leader took part. So, we have the Imams taking the vaccination, pictures were taken of the Imams taking the vaccination and we shared (pictures) more widely using WhatsApp"* (CC7).

Community champions in-depth and insider knowledge of the communities in which they operated, enabled them to not only recognise what information needed to be shared, but also the most appropriate means of communicating messages.

> *"For example, the Farsi community, the Farsi-speaking community, so, they have oral languages, not written language, so communication may be an issue…. Simplifying things and recognising that 'airborne' meant different things in different languages"* (CC9).

There was an added advantage to using non-written formats in challenging misinformation, which enables information to be more easily disseminated via social media (which was identified as being used by minority ethnic communities to access health information) and using family and friends who were considered a credible source of health information.

> *"Because people respond to visual prompts, and also it's something that you can easily pass on to other people. You can pass it through social media"* (CC2).

> *"…most people get their information from their friends and family. So, from the experiences that their friends and family have had, or what they've heard they've experienced, from social media shared by friends and family. So, directly shared on WhatsApp or on Facebook."* (CC8).

Champions drew attention to the advantages of using more 'dynamic' means of sharing information and having conversations with their communities (such as WhatsApp), in contrast to 'static' video recordings where misinformation could be challenged.

> *"WhatsApp groups are very effective in communicating with people. People can have group conversations in there, other people can just be reading. And people can reach out directly if they have a specific question. Which happens often when people are having a group chat about vaccines. Someone then direct messages, asks for something, myself or anyone else. And then we have a more one-to-one conversation about the issues that they may be experiencing"* (CC11).

In contrast, some of the information coming from the government was viewed as being not very clear and understandable to the extent that it was even thought to be harmful.

> *"…what doesn't work is misinformation coming from the government itself. And what I mean by misinformation is not a coherent message, conflicting messages, different things happening"* (CC12).

Therefore, it was not only the person delivering the message – being from the local community rather than a celebrity – that was important in addressing misinformation, but also their knowledge about the community and the most appropriate methods of communication, from the venue to the platform, where social media including WhatsApp proved particularly helpful. In contrast, government information was seen as lacking in coherence, such that champions even labelled this misinformation.

Discussion

Our research has addressed the issue of COVID-19 vaccine uptake in ethnic minority communities in the UK by exploring the government policy during the pandemic aiming to promote vaccination via community champions. Our findings provide insight into how community champions understand their role in vaccine promotion, as well as the factors which enable them to to positively influence vaccine uptake, and the barriers they experienced while promoting health within their communities. Champions were orientated by one, addressing misinformation and two influence of the BAME classification. These findings also underscored how specific mechanisms, including the positioning and actions of champions, were perceived by the champions as enabling them to successfully address vaccine uptake. We have shown that the role of community champions in vaccine promotion was orientated on two fronts: first addressing misinformation and second influence of the BAME classification on their work. A core challenge they faced that were connected to tackling misinformation. In situating the reflections of champions on their role, the targeting of communities and how they combatted mistrust, we found that the wider contextual factors of ethnic minority classifications and vaccine misinformation were crucial intersections for impact upon community engagement and health promotion.

Firstly, the rise of false and misleading information during the pandemic was identified as a barrier to vaccine uptake by champions through our interviews. However, our informants cautioned about making assumptions about how misinformation negatively affects vaccine uptake in their communities. The need to combat misinformation and use of social media for health promotion was emphasised by champions. Here the striking role and influence of media and social media misinformation on vaccine decision making – labelled an 'infodemic' – especially on black and minority ethnic groups (Zarocostas, 2020) was acknowledged by community champions. However, caution must be taken in making assumptions about how misinformation is affecting vaccine uptake negatively amongst communities, we need for well-considered community engagement in a pandemic setting. Champions pointed out that it was both important that the person providing health information be from the local community (as opposed to the use of celebrities) and so have the necessary knowledge about the community to guide decision-making about the most appropriate means of communication. Misinformation was also seen to have originated from the government through a lack of coherent messaging. The longer and more sustained perspective of mistrust of the government stemming from unequal and discriminatory treatment was an ongoing and more difficult problem to address. It is clear that more attention should be paid to the experiences of ethnic minorities in medical settings, as a current and not only historical issue. Community champions present an opportunity as mediators to help build trust between communities and authorities through their positions as being at the grassroots level.

A second key insight was the influence of the BAME classification. Ethnicity is a complex concept composed of genetic make-up, social constructs, cultural identity, and behavioural patterns and our community champions were able to move messaging beyond the 'one size fit all' message relating to ethnic populations. Champions pointed to how ethnic minority classifications used in the context of COVID-19 vaccination uptake were problematic because of the generalisations applied and how this meant that complex structural factors affecting vaccination uptake were often missed. As other

research has highlighted, we recognised the broad part played by social identity (Haslam, Reicher, and Platow 2020), the influence of social elements including social networks (Opel et al. 2013) and social norms (Korn et al. 2020) in the promotion of vaccine uptake. In addition to this indirect influence as a representative of the community. In executing their role community leaders may employ any number of actions or appeals to address the issue of vaccine uptake with varying degrees of perceived success. Such actions include modifying messages to the particular needs of their communities and having knowledge of the specific challenges that their communities faced, as well as understanding the best ways (sources and messages) to combat misinformation. The wider calls for greater consideration of issues affecting ethnic minority groups (for example, the Black Lives Matter movement) have meant an increased awareness of the issues of vaccine uptake and how ethnic minority groups may be differently affected. Nevertheless, policy interventions concerning ethnic minority groups and sustained community support for health issues (including data collection classifications) were viewed as not fully addressed by champions. They argued that there were issues in collecting relevant data to assess where the problem lies as well as in assigning blame for low uptake. Therefore how BAME classifications are enacted will be an ongoing concern for pandemic settings and vaccine uptake for routine vaccination in some groups.

The mechanisms through which community members and leaders were able to influence vaccine uptake have been under-explored in the literature. We highlighted that vaccine champion roles are rooted in a longer history of volunteering for health promotion. However, the specific vaccine focus was often an adaptation from their regular positions within the community. Some champions commented that light-touch training or continuous training for conversations about health topics would have been useful. Still, despite champions not receiving formal training, they were able to use their 'insider' knowledge as authentic and trusted voices to tailor pandemic control messages and public health interventions to account for the cultural, behavioural, and societal differences between and within ethnic minority groups.

The lessons that we draw to feed back to policymakers, are in the provision of ongoing training opportunities for champions to develop their skills and the potential for champions to promote health equality in other areas. As the government-commissioned evaluation report found, training could centre on how to have conversations about vaccines, health and wellbeing, as well as the potential for champions have further impacts on physical health, mental health, and community resilience. Through our research, we have drawn attention to the context, and range in roles and organisations that community champions belong to – for example working with migrants, asylum seekers, refugees, the clinically vulnerable, or religious groups. This variation has also impacted the use of persuasive appeals and perceived impacts that champions had on their minority ethnic communities. What was evident was the utility of the government's involvement with community organisations with different aims and target communities. Being a trusted representative of individual communities on specific grounds – such as through a shared faith – meant that a common identity and perceived authority were valuable in promoting messages and being viewed as a trusted source of information. Such a conclusion matches that of the government-commissioned evaluation of the programmes, that community champions' vaccine promotion work was especially effective within faith communities.

Conclusion

We have concentrated throughout this paper on community champions themselves and the different roles they play to increase demand for vaccines in underserved communities. However, there are several limitations to this focus. It is a challenge to fully determine the extent that the community champion policy has had in changing vaccination coverage in respective communities. The evaluations

for government assessed the policy in how the government sought to empower champions and provide support to community organisations. However, it remains difficult to trace how government policy led to the empowerment of community champions and how this connects to the views and experiences of interviewees that we track. Also, the views of other stakeholders, particularly those of community perspectives towards the role of champions are not captured and would be important to explore as an area of further research.

A wider issue to note is that In the UK, the rates of almost all routine childhood immunisation programmes have continued to fall since the onset of the COVID-19 pandemic (Iacobucci 2022). This ongoing reduction in childhood vaccine uptake is particularly worrying given that rates were already facing their seventh annual decline as COVID-19 struck (Public Health England 2019; WHO 2019). Similarly, the rates of severe flu are highest in children from ethnic minority backgrounds, but uptake of this seasonal vaccination is also lowest in some of these populations (UKHSA 2022). Concurrently, the repeated discovery of vaccine-derived poliovirus in London sewers – pointing to probable community transmission – has sparked a polio booster and subsequent catch-up campaign targeting young children in the capital in 2022 and 2023 respectively (UKHSA 2023). The UK will need to provide evidence of 12 months of zero detections before the WHO will take it off the list of polio 'infected' countries (ibid.). The UK also lost its measles status in 2019 In 2023 and 2024, there have been various outbreaks of measles in unimmunised children, and occurring most commonly in ethnically diverse parts of the country such as London (Gallagher 2023). Indeed some local authorities have reintroduced initiatives that were devised with community champions, such as walk-in vaccination services, to be used for COVID-19 booster campaigns (Sussex World 2023).

An ongoing role for community champions could be to promote childhood vaccine uptake. As UK government data shows, uptake of the childhood vaccination programme has been over the last decade, increasing the chances of an infectious disease outbreak, as seen with measles (GOV.UK, n.d.) A potential solution to mitigate access issues with receiving childhood vaccinations could be for community champions to assist in the delivery of vaccinations in a broader range of community settings, such as schools. School-based vaccine-run programmes deliver higher rates of vaccination uptake in adolescents than compared with primary care (Rehn et al. 2016). It is likely that higher vaccine uptake in school would also be observed in younger children for various reasons (e.g., compulsory school attendance, saving time booking GP appointments). The role of community champions in delivering school-based vaccine programmes could provide an opportunity to directly address parental concerns, engage in meaningful dialogue and act as a trusted source of information in a safe environment. School-based vaccine programmes may identify opportunities for community champions to deliver catch-up immunisations to those who missed the routine infant schedule and thus improve overall uptake across the community. We are not suggesting that champions take on the role of healthcare professionals in this situation but support awareness-raising and confidence in childhood vaccination. Champions could help support the organisation of school-based vaccination programmes that have worked in different settings in the past, although there will also be key other logistical requirements and support needed from the government to enable success. Previously such support has included additional administrative help (to achieve informed consent and the tracking of uptake) and human resources, including coordination by healthcare workers (UK Health Security Agency 2023).

A final recurrent theme also for low COVID-19 vaccine uptake in some ethnic minority groups was due to underrepresentation in the research trials (Kadambari and Vanderslott 2021b). Academic, funding, industry and regulatory bodies should all consider how ethnic minorities are better represented in research studies. Building the necessary trust to spur the involvement of minority communities in research is complicated by historic unethical research conducted within Black communities (Razai et al. 2021; Royal Society 2020). This could include the role of champions in engaging with community

groups as part of a discussion around the importance of wider participation in research. Indeed, representative trials are essential for vaccine development (i.e., ensure the candidate drug being tested is safe and effective in a range of populations), foster wider engagement (i.e., between different minority community groups and healthcare research) and support trust (i.e., recognition that trials are being done in representative communities).

We have aimed through this paper to contribute to a better assessment of the role of vaccine community champions through their action and agency vis-à-vis government policy and vaccination programmes. We concentrated on community leaders in COVID-19 vaccine uptake in Black and South Asian communities to promote health, by understanding the community leader role and what enabled them to effectively use their position to influence vaccine uptake within their community, along with the barriers faced. We have also gathered lessons learnt for future vaccine campaigns and provided recommendations on improvements for the community response to falling vaccination rates, rising misinformation, and issues affecting ethnic minority groups. While the community champion policy encompassed activities and interventions intended to improve COVID-19 vaccine uptake, there are further implications that we have explored to address the falling vaccination rates in particular for childhood vaccines. Future research should aim to better quantify the direct and indirect cost value of community champions in promoting vaccine uptake and potentially reducing subsequent infection. Quantitative and qualitative studies could evaluate how the role of a community champion can be optimised within the NHS and Integrated Care System (NHS England, n.d.). This work coulkd help to better define the role of a community champion within immunisation programmes and healthcare services to inform funding, and resources and continue to expand preventive health strategies.

References

Gallagher, James. 2023. “Rise in UK Measles Cases Causing Concern .” BBC News. 2023. https://www.bbc.co.uk/news/health-65481976.

Gaughan, Charlotte Hannah, Cameron Razieh, Epidemiologist / Statistician, Kamlesh Khunti, Jasper Morgan, Karen Tingay, Francesco Zaccardi, et al. 2022. “COVID-19 Vaccination Uptake amongst Ethnic Minority Communities in England: A Linked Study Exploring the Drivers of Differential Vaccination Rates.” *Analysis Journal of Public Health |* 45 (1): 65–74. https://doi.org/10.1093/pubmed/fdab400.

GOV.UK. 2021. “Community Champions to Give COVID-19 Vaccine Advice and Boost Take up - GOV.UK.” January 25, 2021. https://www.gov.uk/government/news/community-champions-to-give-covid-19-vaccine-advice-and-boost-take-up.

———. 2022. “National Effort to Vaccinate Vulnerable Communities Receives Funding Boost.” 2022. https://www.gov.uk/government/news/national-effort-to-vaccinate-vulnerable-communities-receives-funding-boost.

———. n.d. “Latest Childhood Vaccination Uptake Statistics Published .” Accessed April 2, 2024. https://www.gov.uk/government/news/latest-childhood-vaccination-uptake-statistics-published#.

Great Britain. Department for Digital, Culture, and Great Britain. Home Office. n.d. “Online Harms White Paper : Full Government Response to the Consultation.,” 96. Accessed July 16, 2023. https://www.gov.uk/government/consultations/online-harms-white-paper/outcome/online-harms-white-paper-full-government-response.

Haslam, S. Alexander, Stephen D. Reicher, and Michael J. Platow. 2020. “The New Psychology of Leadership : Identity, Influence and Power.” *The New Psychology of Leadership*, June. https://doi.org/10.4324/9781351108232.

Iacobucci, Gareth. 2022. “UK Childhood Vaccination Rates Fell Last Year in Almost All Programmes, Figures Show.” *BMJ* 378 (September): o2353. https://doi.org/10.1136/BMJ.O2353.

Kadambari, Seilesh, and Samantha Vanderslott. 2021a. “Lessons about COVID-19 Vaccine Hesitancy among Minority Ethnic People in the UK.” *The Lancet. Infectious Diseases* 21 (9): 1204–6. https://doi.org/10.1016/S1473-3099(21)00404-7.

———. 2021b. “Lessons about COVID-19 Vaccine Hesitancy among Minority Ethnic People in the UK.” *The Lancet Infectious Diseases* 21 (9): 1204–6. https://doi.org/10.1016/S1473-3099(21)00404-7.

Kamal, Atiya, and Laura Bear. 2021. “Community Champions Policy: Key Principles and Strategic Implications for Recovery from Covid-19.”

Korn, Lars, Robert Böhm, Nicolas W. Meier, and Cornelia Betsch. 2020. “Vaccination as a Social Contract.” *Proceedings of the National Academy of Sciences of the United States of America* 117 (26): 14890–99. https://doi.org/10.1073/PNAS.1919666117/-/DCSUPPLEMENTAL.

McHale, Sheona, Alice Pearsons, Lis Neubeck, and Coral L. Hanson. 2020. “Green Health Partnerships in Scotland; Pathways for Social Prescribing and Physical Activity Referral.” *International Journal of Environmental Research and Public Health* 17 (18): 1–13. https://doi.org/10.3390/IJERPH17186832.

NHS England. n.d. “What Are Integrated Care Systems?” Accessed July 18, 2023. https://www.england.nhs.uk/integratedcare/what-is-integrated-care/.

Opel, Douglas J., John Heritage, James A. Taylor, Rita Mangione-Smith, Halle Showalter Salas, Victoria DeVere, Chuan Zhou, and Jeffrey D. Robinson. 2013. “The Architecture of Provider-Parent Vaccine Discussions at Health Supervision Visits.” *Pediatrics* 132 (6): 1037. https://doi.org/10.1542/PEDS.2013-2037.

Paul, Elise, Daisy Fancourt, and Mohammad Razai. 2022. “Racial Discrimination, Low Trust in the Health System and COVID-19 Vaccine Uptake: A Longitudinal Observational Study of 633 UK Adults from Ethnic Minority Groups.” *Https://Doi.Org/10.1177/01410768221095241* 115 (11): 439–47. https://doi.org/10.1177/01410768221095241.

Public Health England. 2019. “Childhood Vaccination Coverage Statistics Key Findings.”

Razai, Mohammad S., Tasnime Osama, Douglas G.J. McKechnie, and Azeem Majeed. 2021. “Covid-19 Vaccine Hesitancy among Ethnic Minority Groups.” *BMJ* 372 (February). https://doi.org/10.1136/BMJ.N513.

Rehn, Moa, Ingrid Uhnoo, Sharon Kühlmann-Berenzon, Anders Wallensten, Pär Sparén, and Eva Netterlid. 2016. “Highest Vaccine Uptake after School-Based Delivery - A County-Level Evaluation of the Implementation Strategies for HPV Catch-Up Vaccination in Sweden.” *PLOS ONE* 11 (3): e0149857. https://doi.org/10.1371/JOURNAL.PONE.0149857.

Royal Society, The. 2020. “COVID-19 Vaccine Deployment: Behaviour, Ethics, Misinformation and Policy Strategies.”

Sussex Health & Care Partnership. 2021. “Covid-19 Vaccination Champions.” 2021. https://assets.publishing.service.gov.uk/gohttps://web.archive.org/web/20220703213446/https://www.sussexhealthandcare.uk/get-involved/covid-19-vaccination-champions/vernment/uploads/system/uploads/attachment_data/file/1011854/A_rapid_scoping_review_of_community_champion_approaches_for_the_pandemic_response_and_recovery_V8.pdf.

Sussex World. 2023. “Walk-in Mobile Vaccination Service Comes to Littlehampton for Covid-19 Autumn Booster Programme.” 2023. https://www.sussexexpress.co.uk/health/walk-in-mobile-vaccination-service-comes-to-littlehampton-for-covid-19-autumn-booster-programme-4355941.

The Oldham Times. 2022. “Oldham’s Community Champions Credited for Vaccine Uptake Boost .” March 26, 2022. https://www.theoldhamtimes.co.uk/news/20021699.oldhams-community-champions-credited-vaccine-uptake-boost/.

The Shields Gazette. 2021. “South Shields FC Sign up as Covid Community Champions to Help Fight Virus in South Tyneside.” March 19, 2021. https://www.shieldsgazette.com/news/politics/council/south-shields-fc-sign-up-as-covid-community-champions-to-help-fight-virus-in-south-tyneside-3171897.

UK Health Security Agency. 2023. “Supporting Immunisation Programmes .” GOV.UK. October 10, 2023. https://www.gov.uk/government/publications/health-protection-in-schools-and-other-childcare-facilities/supporting-immunisation-programmes#school-based-immunisation-programmes-what-happens.

UKHSA. 2022. “Quarterly Vaccination Coverage Statistics for Children Aged up to 5 Years in the UK (COVER Programme).”

———. 2023. “Polio Immunisation Response in London 2022 to 2023: Information for Healthcare Practitioners.” 2023. https://www.gov.uk/government/publications/inactivated-polio-vaccine-ipv-booster-

information-for-healthcare-practitioners/polio-immunisation-response-in-london-2022-to-2023-information-for-healthcare-practitioners.

WHO. 2019. “Eighth Meeting of the European Regional Verification Commission for Measles and Rubella Elimination (RVC): 12–14 June 2019, Warsaw, Poland.” 2019. https://www.who.int/europe/publications/i/item/WHO-EURO-2019-3623-43382-60860.

Witham, Miles D., Eleanor Anderson, Camille Carroll, Paul M. Dark, Kim Down, Alistair S. Hall, Joanna Knee, et al. 2020. “Developing a Roadmap to Improve Trial Delivery for Under-Served Groups: Results from a UK Multi-Stakeholder Process.” *Trials* 21 (1). https://doi.org/10.1186/S13063-020-04613-7.

Yazdannik, Ahmadreza, Alireza Yousefy, and Sepideh Mohammadi. 2017. “Discourse Analysis: A Useful Methodology for Health-Care System Researches.” *Journal of Education and Health Promotion* 6 (1): 111. https://doi.org/10.4103/JEHP.JEHP_124_15.