FACULTY OF
PUBLIC HEALTH

A Formal Evaluation of the Impact of Interventions Aimed at Vaccine Uptake and Vaccine Confidence by Black, Asian and Minority Ethnic (BAME) Health and Care Professional Networks

Authorship and Acknowledgements

This report was produced by researchers within the School of Life and Medical Sciences at the University of Hertfordshire (Dr Shivani Sharma, Miss Lauren Fitzgerald, Mr Ryan James, Prof. Keith Laws), and in collaboration with Prof. JS Bamrah CBE (University of Manchester), and Prof. Indranil Chakravorty MBE (University of Hertfordshire).

The research was funded by the Public Health England, and overseen by the Faculty of Public Health. In undertaking this important work, we are grateful to all the professional and community network members who gave their time to share valuable insights into their experiences during the COVID-19 vaccine effort, including members of the Federation of Ethnic Minority Healthcare Organisations and the British Association of Physicians of Indian Origin. Encouraging a wide range of community contributions would not have been possible without support from our bilingual project workers who worked hard to remove barriers to research engagement for those for whom English was not their first language: Mrs Riffat Mahmood, Mrs Rukhsana Begum, and Mrs Anjna Kanani.

FACULTY OF PUBLIC HEALTH

University of Hertfordshire UH

Public Health England

FEDERATION OF ETHNIC MINORITY HEALTHCARE ORGANISATIONS

Contents Page

Executive Summary

The COVID-19 vaccination programme is an important step towards reducing the spread of the virus, safeguarding communities around the world. Evidence from the USA and UK however indicates that vaccine hesitancy is higher in specific minority ethnic groups. This report includes research with grassroot community organisations including health and care professional networks comprised of workforce from across a wide range of medical and allied health disciplines, in addition to voluntary organisations advocating for community health and well-being, faith groups, and members of the public to explore:

- The nature of support provided within the community to reduce vaccine hesitancy in minority ethnic people, specifically through established health and care professional networks
- Perceptions of support from community groups working with minority ethnic people
- Attitudes of minority ethnic members of the public themselves towards the impact of efforts from relevant health and care professional networks
- Attitudes of community towards professional health and care networks supporting with on-going public health issues

A mixed-methods approach was used involving a survey of minority ethnic health and care professional networks with purposive follow-up interviews. One-to-one interviews were also undertaken with community organisations, and adult members of the public identifying as minority ethnic. The survey and interview methods were co-produced with stakeholders forming part of the research advisory group to ensure relevance and impact of outcomes. The research included language adapted participation for community interviews to address known barriers to engagement.

Forty-eight health care professional network/organisation representatives completed the survey, with six professionals engaging with follow-up interviews. Responses were further enriched by interviews with 24 grass roots community organisations/ leaders and lay people. Data analysis included descriptive summaries of survey responses, and thematic analysis of the interview data.

Based on the findings, this report is divided into four sections, which capture the main themes arising from exploring the research objectives:

- Drivers of attitudes towards the COVID-19 vaccine
- The role of minority ethnic health and care professional networks and organisations as a form of community asset
- Barriers and facilitators of credible community engagement

- Broadening the reach of community engagement for future public health

Summary of main findings

Findings from the survey and interviews undertaken concur with the general literature on the extent of COVID-19 vaccine hesitancy within minority ethnic communities. The analyses demonstrate the vital role that minority ethnic health and care professional networks played as champions of initiatives to encourage uptake, evidencing the scale of voluntary effort. There was much value placed on the range of interventions that were delivered to avoid disadvantage in specific communities, though this effort was not equally reaching all community members, with scope for further awareness raising. Though there appears to be appetite for networks playing a sustained role in public health, independence and resourcing are central considerations.

Key findings of note are that:

- Although 94% of minority ethnic adults who were interviewed from the community had received both doses of the COVID-19 vaccination, 13% felt forced to receive the vaccine and 59% expressed hesitancy towards the vaccination. At the time of interviews, 14% had declined a third and/or fourth booster vaccination.
- While conspiracies were present in the discourse surrounding the COVID-19 pandemic and vaccine, hesitancy largely originated from a lack of information layered with intergenerational trauma and current mistrust of public health and governmental institutions.
- Community interviews largely echoed the role that minority ethnic health and care professional networks and organisations had played within society, especially going above and beyond to safeguard those most vulnerable during the pandemic to misinformation and or inadequately tailored information.
- Survey and interview responses from health and care professionals involved in networks elucidated the range of community initiatives that cluster into three types- scientific evidence, education, and specific active interventions to increase vaccine uptake.
- The cost of professional involvement in the community cannot be fully quantified but it is clear that:
    - Input in the COVID-19 vaccine roll out in the community was additive to roles in existing voluntary capacities, with the vast majority of professionals (70%) contributing 4 or more hours per week towards community outreach.

- Though community recognised value, many professionals felt that senior leaders within the health care sector and government did not always acknowledge contributions.
- There were mixed views about how minority ethnic health and care professional networks and formal public health institutions could work together in future, mainly centring around the need to retain independence, and to renumerate organisations for sustainable impact on public health.

Overall, there are 10 recommendations embedded within the research, clustered into 2 themes.

Recommendations

Engaging with Community

1. Healthcare providers should understand and meaningfully engage with communities they serve, providing tailored opportunities for those least likely to share their health priorities and concerns to contribute.
2. Public and patient involvement mechanisms should be integrated in everyday practice, and not restricted to needs based engagement effort only, supporting transparent lines of communication.
3. Feedback to communities should be prioritised to help build or re-build trust in services.
4. Changes in health care provision should ensure that all community members have equal opportunity to access information and ask questions to support implementation and engagement.
5. Healthcare outreach should meet under-served groups in familiar settings such as community spaces or places of worship to help support engagement and trust.
6. Healthcare providers should develop reciprocal relationships with professional networks that may serve their areas in addition to local community leaders as trusted advocates for the public they support.

Harnessing Expertise of Minority Ethnic Health and Care Professional Networks

7. Opportunities should be created for regular, open forums between public health officials and minority ethnic health and care professional networks and organisations to make the most of community intelligence.
8. Relevant public health officials should be encouraged to attend conferences and events organised by minority ethnic health and care professional networks and organisations as a window into the range of public health and workforce initiatives being progressed.
9. The value of contributions made by networks should be extended by providing ringfenced funding aligned to public health priorities, particularly those around reducing health equity gaps.
10. NHS and wider public health employers should consider dedicated time allowance for outreach within the job roles of health and care professionals to progress community outreach activities and or scope other mechanisms of valuing effort.

A note on terminology

'Minority ethnic' is used in this report as a general term to describe a broad range of individuals who identify with communities other than the white majority ethnicity in the UK. This is with the understanding that language is continually evolving, and that ethnicity is not a static entity. Whilst individuals may share the same ethnic identity, ethnic groups are heterogeneous and experiences, perspectives and opinions are formed through, and because of, a myriad of personal and societal factors. Where possible, the report is specific in disaggregating information about the ethnic identity of the participants who contributed to the research reported, inclusive of white heritage diversity.

Plain English Summary

The COVID-19 pandemic took the world by surprise. However, in record timing, intervention in the form of the COVID-19 vaccine became available. What we know from exiting evidence is that not all people in society were equally likely to want to take the COVID-19 vaccine, and this is often referred to as being 'vaccine hesitant'. In the UK, vaccine hesitancy was more common in people from minority ethnic groups. For example, those from a Black or Asian background. Health care workers from the same communities who are part of professional networks came together to help support those least likely to take up the COVID-19 vaccine. In this research, surveys and interviews were undertaken with a wide range of people to find out what minority ethnic health and care professionals did in the communities they are part of to help improve uptake of the COVID-19 vaccine, and how this input was received by the community directly. This report shows that minority ethnic health care professionals engaged in a wide range of activities to help the communities they identity with, and on a voluntary basis in addition to their everyday job roles. This included educating members of the public about the importance and the safety of the COVID-19 vaccination, contributing to scientific literature regarding health inequalities, that is unfair differences in health and well-being during the pandemic, and informing Government policy and response. Community members recognised and valued this input, especially because they often expressed difficulty finding and understanding general information, and or lacked trust in healthcare providers. There are 10 recommendations from this report that were arrived at in partnership with community members and professionals themselves. These recommendations are important because they can help ensure that future public health messages and interventions are equally likely to benefit all communities, helping to reduce the gap in health care access, experience, and outcomes.

1. Introduction

The COVID-19 pandemic took the world by surprise, leading to high levels of mortality and long-term illness and health complications. Governments and public health organisations had to make rapid decisions to safeguard populations, leading to reconfiguration in healthcare infrastructure and care delivery. What has been clear is that the virus is not a 'great leveller'. Research suggests that it has impacted some of the most disadvantaged groups in society, with evidence clearly showing that members of minority ethnic communities have been amongst the most impacted (Sharma, Giovinazzo and Lawrence, 2020). This includes high rates of mortality, increased hospitalisation, as well as economic disadvantage (see POST review). Exiting disparity in health has been widened by this virus, where the community groups carrying the highest burden of deprivation and existing poor health were more vulnerable (Sharma, Giovinazzo and Lawrence, 2020).

The COVID-19 vaccination programme is an important step to reducing the spread of the virus. Nonetheless, evidence from the USA and UK shows that vaccine hesitancy is higher in specific minority ethnic groups, including in those who are otherwise vaccine willing (Nguyen, 2022). In the UK, a study based in Luton for example evidenced that ethnicity and age were the only sociodemographic variables that could predict hesitancy towards COVID-19 vaccination, with several specific active drivers to reducing this identified (Cook et al, 2022).

This research explored the specific role that minority ethnic health and care professional networks and organisations played in reducing vaccine hesitancy and improving vaccine confidence. This is to inform in part an understanding of the feasibility of these networks in playing a sustained role in future public health agendas. There is already a policy landscape to support this. For example, the NICE Quality Standard on Community Engagement: Improving Health and Wellbeing (2017) sets clear objectives to progress methods by which community is actively involved in health priority setting, monitoring, and evaluating actions to reduce health inequities. As representatives of communities, minority ethnic health and care professional networks, comprised of workforce such as medics and allied health professions, are uniquely positioned to narrow the health gap. They understand health and health infrastructure, but also understand a diverse range of community groups. In the UK, the Chief Medical Officer's (CMO) team has published a report that draws on the views of members of such organisations as to how they have supported the vaccine uptake effort specifically (Latif et al, 2021). This research is an extension of this earlier work. It includes the findings of a survey of a much boarder range of professional networks in the health and care space (for example, medicine, nursing, psychology, pharmacy), with purposive, in-depth follow-up interviews also. Importantly, the research engaged with grassroot community groups including

voluntary organisations and faith groups, to understand how, if at all, they have drawn on professional networks to support vaccine uptake. Through these groups, the research also aimed to explore how lay community members have received this support and their attitudes towards health and care workforce meeting future public health needs in a similar way.

The following research questions were addressed:

1. How did minority ethnic health and care professional networks support vaccine confidence in under-served communities?
2. What are the successes and challenges faced by these groups in working towards improving public health during the pandemic?
3. How well did the COVID-19 effort align with the strategic aims of minority ethnic professional networks?
4. How was support received by grassroot community groups and individuals?
5. What was the estimated cost in terms of workforce resource to provide such input in the community?
6. How feasible is it for such professional networks to support future public health priorities in the community?

2. Research Methodology

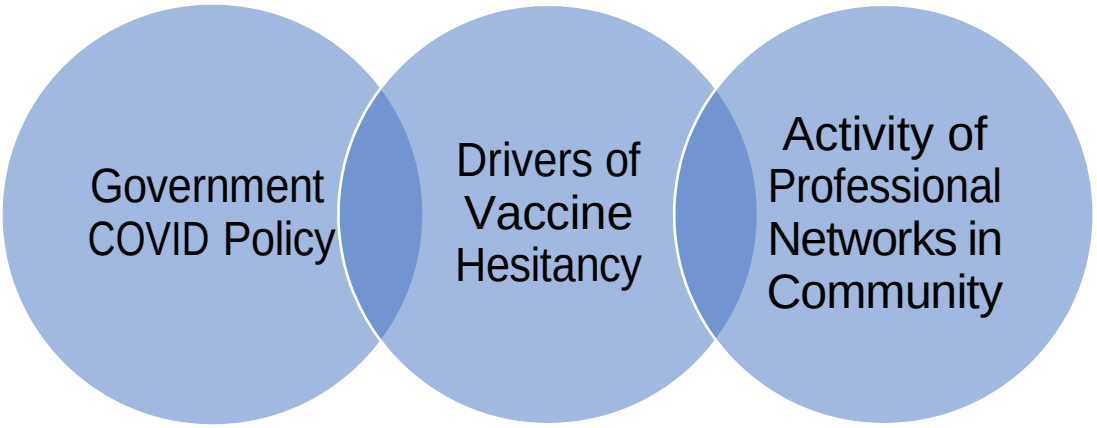
2.1 *Approach*

The findings in this report are based on primary research undertaken using a mixed-methods approach as follows:

- A survey undertaken by members of minority ethnic health and care professional networks/ organisations, with follow-up semi-structured interviews with a purposive sample.
- One to one semi-structured interviews with leaders of minority ethnic communities such as faith leaders, heads of community advocacy groups.
- One to one semi-structured interviews with general community members identifying as minority ethnic.
- Photo-voice feedback from healthcare professionals and community members to summarise their reflections on workforce and community parentships for health.

2.2 *Development, implementation, and analysis of survey of professionals*

A survey was developed by researchers based on a desktop review of available evidence including the report outlining outcomes of round-table discussions from Latif et al., (2021). The data available in Latif et al., was re-analysed using the Alceste (Alceste Software (image-zafar.com) software to independently construct key clusters or themes that were apparent in addition to the researchers own summary. These clusters were further refined and elaborated on in consultation with an advisory group comprised of 6 professionals from minority ethnic health and care networks and/or organisations, inclusive of a range of workforce specialities and faith or ethnic groups. The final survey comprised 38 questions across three domains as outlined below. Participants accessed and completed the survey online supported by distribution from a range of professional networks and social media, and hard copies distributed at 2 national conferences.



Domains of professional survey

2.3 *Development and analysis of interviews*

Three sets of interviews were undertaken using distinct semi-structured topic guides. The first set of interviews were with health and care professionals who completed the survey and were aimed at delving deeper into emerging themes in the data. Further, interview topic guides were developed to ask community leaders and minority ethnic members of the public directly about their awareness of professional networks, whether they had received support from such network members in relation to the COVID-19 vaccine, and finally, attitudes towards future partnership of this nature. All interviewees were offered online or face-to-face as a mode, with professional interviews undertaken online and community face-to-face. Interviews with community members were conducted by bilingual project workers to reduce barriers to research engagement, targeting voices that are likely under-represented in COVID-19 research. Interviews were offered in English, Urdu, Gujarati, Punjabi, Hindi, or Bengali as per preference. Interviews were transcribed, and forward translated into English as needed by

project workers or research team members for analysis. All interviews were audio recorded (with consent) and analysed using NVivo Qualitative Analysis Software (version 12 Windows; Mac version 2022). Reflexive thematic analysis, a widely used approach, was implemented in accordance with Braun and Clarke (2006; 2019). A full analysis of this qualitative data is being published separately with a summary provided here to enrich arising recommendations.

2.4 *Ethical Considerations*

Ethical approval was received from the University of Hertfordshire Health, Science, Engineering and Technology Ethics Committee with Delegated Authority *[LMS/SF/UH/05095].* The names of networks, organisations, community, faith, and advocacy groups have not been included for anonymity of participants, aside from in case studies where explicit approval has been sought.

2.5 *Structure of Findings*

The main findings are represented under four overarching themes that align with the objectives of the research, but also capture narrative that emerged as part of the same. Survey responses are used with embedded experiences shared in qualitative enquiry to link to arising recommendations. Further, specific case studies are presented by professional groups who have consented to their activity being shared. This is to capture the richness of community engagement.

3. Findings

3.1 *Survey and Interview Participants*

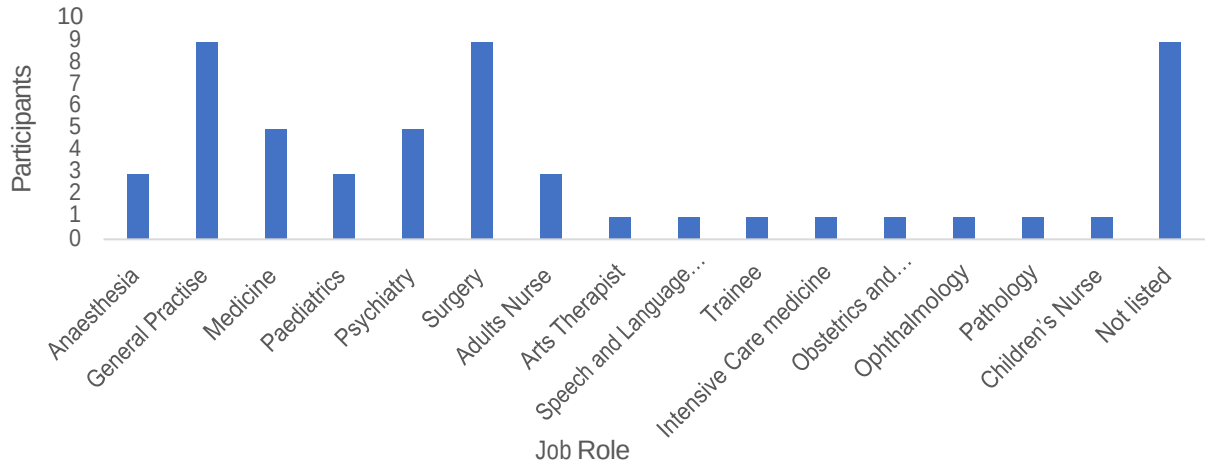
Fifty-nine professionals accessed the survey. After incomplete data were removed, 48 complete responses were included. Overall, thirty interviews took place with representatives of professional health and care networks and/or organisations (n=6), community leaders, as well as community members (n=24). The majority (51.2%) of participants self-identified as male, followed by female (46.2%), gender diverse/non-binary/x gender (1.3%) and preferred not to say (1.3%). The self-identified ethnicities of respondents are outlined in Table 1, with the majority identifying as Indian (40.25%).

Table 1:Self-reported ethnicity of participants overall

Ethnicity	%
Indian	40.25
Pakistani	9.1
Chinese	1.3
Any other Asian background (*Bangladeshi, Malaysian of Sri Lankan origin, Nepalese, Sri Lankan, Sikh, British Asian, Hindu, British Kashmiri, Bangladeshi, British Muslim*)	18.18
African	12.99
Caribbean	2.6
Any other Black, Black British, or Caribbean background (*Black British*)	3.9
English, Welsh, Scottish, Northern Irish, or British	1.3
Any other White background (Specified as Ashkenazi Jewish, Gypsy, Polish)	3.89
Arab	3.89
Not stated	2.6

The job roles of representatives of health and care professional networks and/or organisations who took part in the survey are represented in Figure 1, below.

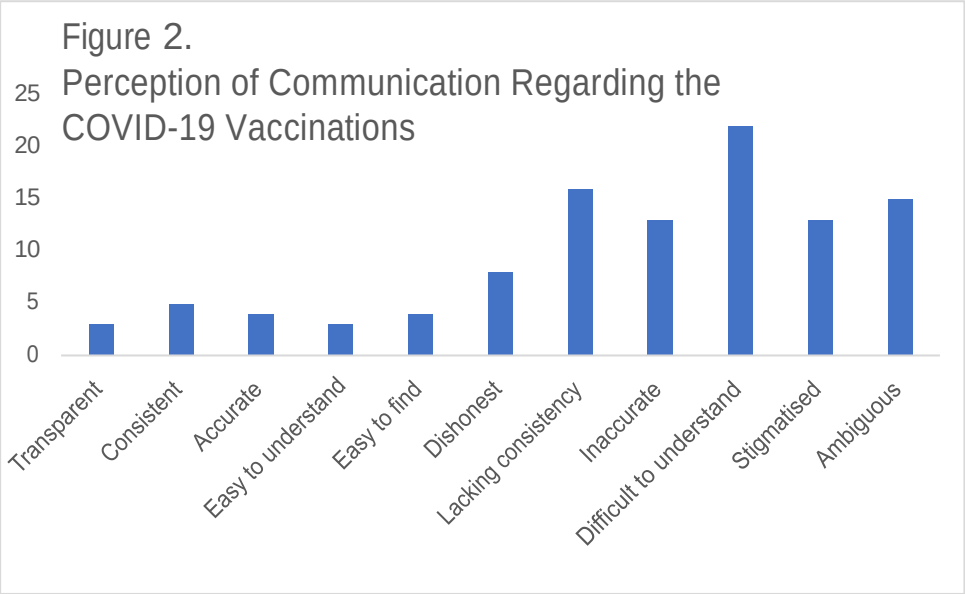
Figure 1.
Job Roles of Health and Care Professionals Participating in Survey and Interviews.



3.2 *Drivers of attitudes towards the COVID-19 vaccine*

- **Participants reported negative perceptions of information surrounding the COVID-19 vaccine.**

Almost half of all survey respondents stated that information regarding COVID-19 vaccinations was difficult to understand (Figure 2). Further, almost a third of health care professionals surveyed felt that information was inconsistent and ambiguous.



Across the range of interviews undertaken, participants agreed with the perception of unclear communication from healthcare providers and governmental bodies leading to misinformation based on half-truths and rushed public announcements. One example of this is the belief that children would not be affected by the pandemic, an idea which some in the community relied on as a comfort in a difficult time, though later data showed impact in children and young people also. Interview participants held on to misinformation about earlier aspects of the pandemic in interpreting advice on the vaccine also.

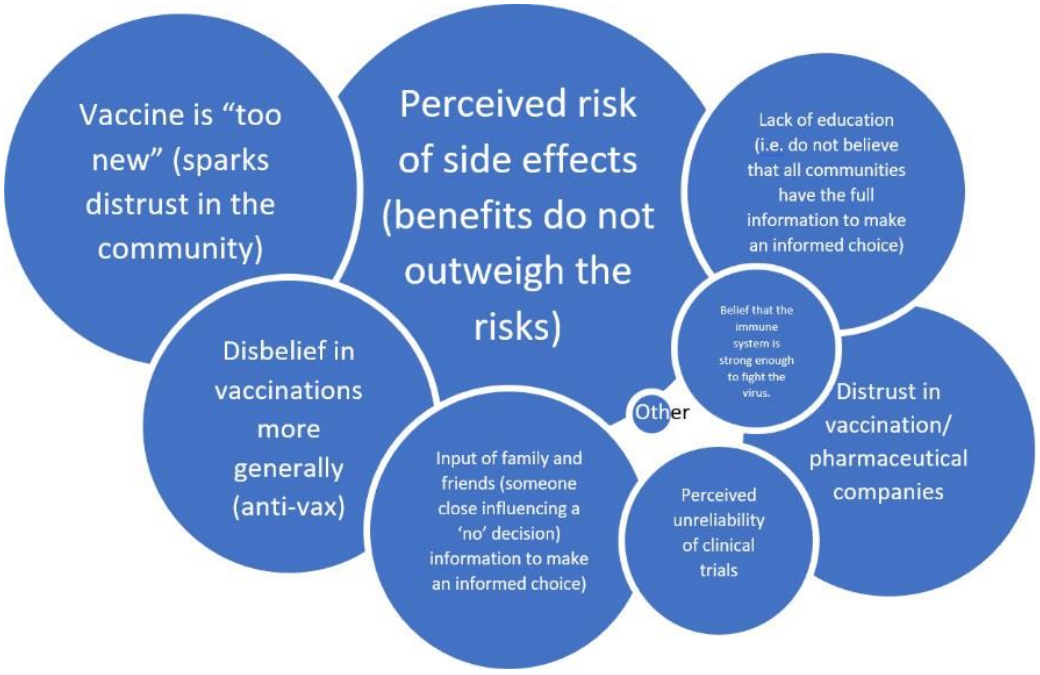
> *"…people were like it doesn't affect kids, isn't it great that it just doesn't affect kids… There was a lot of like reliance on that in our community, and people really needed it to be true… It came from the higher up's and then it was reinterpreted in different spaces in language that was useful to our community, and I mean they thought it was useful to our community."*
>
> **Female, 35, Asian Indian, Community Leader**

> *"I thought, have you (referring to public health officials) created this lot of graphs on last minute.com and just tried to present them because it really did look like that."*
>
> **Female, 60, British Asian, Public Member**

> *"…I don't know. There was a lot of, a lot of miscommunication from the government that you can't do this yet, you can't do that, but the government were doing it."*
>
> **Female, 34, British Bengali, Public Member**

- **While conspiracies were present in the discourse surrounding COVID-19, vaccine hesitancy was largely driven by intergenerational trauma and current mistrust of public health and governmental institutions.**

Figure 3. *Most common Issues Discussed in Relation to COVID-19 Vaccine*



Far-fetched and fanciful conspiracy theories were reported by survey and interview respondents as scenarios they had heard about within the community and as professionals and community leaders, worked to address. However, these examples were few and far between as compared to more systemic issues related to health equity alongside wider issues around robust access to accurate vaccine related information.

> *"Some were saying that when they give you the vaccine, they will medication chip, they put a chip in. And whatever we speak about they find know about".*
>
> **Female, 62, Kashmiri, Public Member**

Some individuals from countries in which vaccination programs were mandatory were resistant to vaccination for themselves and their families as a form of exercising their rights.

> *"In Poland it's mandatory that your child has to take vaccines… …I don't want to generalise, I don't want, I won't say most, but many people who were quite reluctant to take any vaccine. So, I said, that's really weird, so you are from a country where you know the whole perception of that is that you have to take it, now only because you've got that right to choose, you're choosing not to take it.*
>
> **Male, 38, White Other/ Polish, Community Leader**

Legitimate concern of individuals who have previously had negative experiences with health and care services or governmental bodies were also highlighted as a prevalent reason for vaccine hesitancy and were stated as being the most difficult to resolve.

> *"She [participant's mother] also talked a lot about the Thalidomide… …she had like very vivid memories of it being in the news, feeling very frightened about this is all happening so quickly. We don't know what's in this thing, we don't know what the long-term consequences are, and she felt like she had seen it already before…."*
>
> **Female, 35, Asian Indian, Community Leader**

> *"I think the past history and experience of the Black and Asian community are massive contributors to why there was a poor uptake."*
>
> **Male, 68, Sikh, Minority Ethnic Health and Care Professional Representative**

All but one of the 24 community members involved in interviews had received the first two doses of the COVID-19 vaccine with some community leaders not wanting to get any boosters and varying vaccine confidence in community members and leaders. Of lay people interviewed, 94% had received both doses of the COVID-19 vaccination but still 59% expressed hesitancy towards the vaccination, and 14% declined a third and/or fourth booster vaccination. Despite the reasons above of mistrust and lack of transparent information causing some hesitancy, most participants saw receiving the vaccine as a sort of public health duty to protect those around them.

> *"…this vaccine is put out there to protect citizens, and the government wouldn't do anything that would put people or persons at harm".*
>
> **Female, 45, Black African, Public Member**

> *"Initially the concerns were around, amongst the concerns I should say, there were the more far-fetched concerns like 5G and Bill Gates and so on, I think as that became less of an issue, and that of course required effort. Then the concerns became rooted in things that were credible, so long term efficacy things like pregnancy, things like the clots…I suppose the easier barriers that were being put up around, oh it's not Halal, oh it's been you know, the microchip, this that and the other. So once we managed to get rid of those things, the old barriers still remain in that I just don't trust that."*
>
> **Male, 33, British Pakistani, Minority Ethnic Health and Care Professional Organisation Representative**

Recommendations 1-6 therefore aim to progress regular forums for communities to share health care priorities and information needs, acting to build or in many cases re-build trust for public health benefit.

3.3 *The role of minority ethnic health and care professional networks and organisations as a form of community asset*

- **Participants discussed the role that minority ethnic networks and/or organisations comprised of medical and allied health workforce played in the COVID-19 response including promotion of the vaccine programme**

The research asked about the remit of networks generally. Two aims emerged: to support colleagues professionally through mentoring, training, and networking, and second to support communities through researching health inequalities, providing culturally specific guidance, and addressing health care concerns. Each organisation varied in the extent to which they balanced these two objectives.

> *"Most people in the space are looking after professional issues… …our main sort of reason for existing was around the inequalities we ourselves are experiencing, our families are experiencing and our communities are experiencing…"*
>
> **Male, 33, British Pakistani, Minority Ethnic Health and Care Professional Representative**

During the pandemic, the founding aims of organisations did not change but the work which needed to be undertaken in relation to community health became more pressing. All 48 survey respondents shared the initiatives that were rapidly mobilised to support communities, addressing gaps in the government response in the main. Examples provided clustered into 3

main types: (1) scientific evidence- e.g. support with rapid evidence review of the potential effects of COVID-19 when fasting for Ramadan, the suitability of vaccinations and of the differential occurrences of death in minority ethnic communities; (2) **education** such as providing advice and guidance, often language and or other culturally adapted on various COVID-19 and vaccine topics in the community through videos, infographics, webinars, 1-1 advice, as well as consulting with government and public health officials to share information gaps and community need; and (3) active interventions such as hosting vaccine clinics in community spaces (faith based places of worship) as government restrictions eased.

> *"…in the UK we were working together with the CMO office, we submitted evidence to the parliament inquiry, we were part of a number of seminars, you know faith-based seminars and there was also an engagement event with CMO Chris Whitty about all their professional ethnic organisations where we presented some case studies…"*
>
> **Male, 44, British Indian, Minority Ethnic Health and Care Professional Representative**

> *"…really, you know, important and powerful impactful stuff translated into, I think, fourteen different languages we translated those things [position statements on vaccines] into, and I think it had a significant, you know, impact on helping the Muslim community overcome the, I suppose the easier barriers that were being put…"*
>
> **Male, 33, British Pakistani, Minority ethnic health and care organisation representative.**

Survey respondents (97.4%), based on the success of these interventions and partnerships with community stated that they are supportive of minority ethnic health and care professional networks having a formal remit in addressing public health issues and reducing health inequalities in the foreseeable future. Though respondents found it hard to quantify this effort, there was consensus that voluntary contributions were not sustainable and a different approach to fuelling this support would need to be considered, seeing such networks as a form of community assets.

- **The cost in workforce voluntary hours cannot be fully quantified but is not at a level that is sustainable for organisations to absorb moving forward. Just under 70% of Health Care Professionals reported spending 4+ voluntary hours a week supporting communities who are under-served. Providing this support was also not without its challenges.**

Survey respondents spent additional hours, on top of their contracted working hours and additive for some to voluntary roles within the boards or alike of networks, to support

community level initiatives during COVID-19 and the vaccine programme specifically. This includes: **16.7%** of representatives volunteering an estimated **9+ hours of their time per week**, **20.6% volunteering 4-8 hours**, 32.4% volunteering 2-4 hours, and 29.4% of professionals spending less than 2 hours. This indicates the scale of support offered to under-served communities in the national response, at a time when healthcare infrastructure was generally stretched and placing strain on the same professional groups.

Accurately quantifying the number of hours or the cost of the work undertaken to improve vaccine confidence was deemed near impossible, as this was not a pre-planned, mapped initiative. However, the estimates included for time by professionals do signal the scale of input required to support communities and from this the resource offered by such networks is seen to be immense, keeping in mind that professionals estimated their personal effort, and this only captures the small proportion of people responding to the survey.

> *"[before the pandemic] I would say, maybe approximately, maybe one [webinar] a month or one in two months. …Yes [that increased], during COVID, yes, we spent more time because of the Ramadan compendium and the rapid review, and then the vaccinations."*
>
> **Male, 43, British Asian, Minority Ethnic Health and Care Professional Representative**

Challenges faced when providing support as described by survey respondents included financial (37.5%), logistical (41.7%), time (58.3%), and stigma for promoting the vaccine (14.6%). Other stated reasons included political, lack of members and resources, and educational expertise. In terms of support moving forward, networks and organisations would benefit most from financial support (56.3%) with emerging suggestions of ringfenced schemes, and educationally/through training (56.3%) to ensure currency of messages. Other suggested support and sometimes dependent on the size of organisation included I.T. support, access to public media, time allocation from employer, more volunteers, and recognition,

- **There are mixed views about how public health organisations and professional networks can work together in future, primarily due to the need to maintain independence and to be resourced fairly.**

Just over 87% of survey respondents supported the idea that professional groups should be more integrated with formal public health organisations, care systems, and/or Government. However, exploring this further in interviews highlighted that collaboration and open communications with formal health institutions are necessary but need to retain a degree of independence for success in representing the interests of communities burdened by systemic lack of trust and unfair treatment.

"The segregation that took place during the pandemic. By that I mean the non-availability of PPE and the allocation of duties in COVID wards created mistrust. It was the networks that had to do the work of earning the trust again. This was done without any input from the Government local authority or the NHS. The networks help in maintaining trust and confidence in the health and care system. However, they can only do this if they are fully recognised and integrated into the health system".

Male, 49, African, Minority Ethnic Health and Care Professional Representative

"…A key factor in our decision-making is will this money even if they have no strings attached to it, but will it be perceived as us being in the pocket of, you know, the bad system. And so, I think ensuring that transparency is there, and that relative arm's length and independence is there, this is critical in this. …so that it's clear that organisations are being not being funded to carry out the whims and desires of the system…"

Male, 33, British Pakistani, Minority Ethnic Health and Care Professional Representative

"The pandemic showed the critical role played by minority ethnic health and care professional networks and organisations in public health efforts. It is important that these organisations are adequately resourced and supported in order to maximise impact and unsure sustainability."

Female, 38, Indian, Minority Ethnic Health and Care Professional Representative

"I think it's important to get the right information from the NHS… …but it's also important to maintain the independence and not be another arm of the NHS… …then they can independently verify information, and you know, I think any information needs to be peer reviewed and independently looked at, just because it's coming from the NHS does not have to meant that it has to be correct… …and you know when organisations have that independence you're able to spread that information and people will then be able to trust you."

Male, 43, British Asian, Minority Ethnic Health and Care Professional Representative

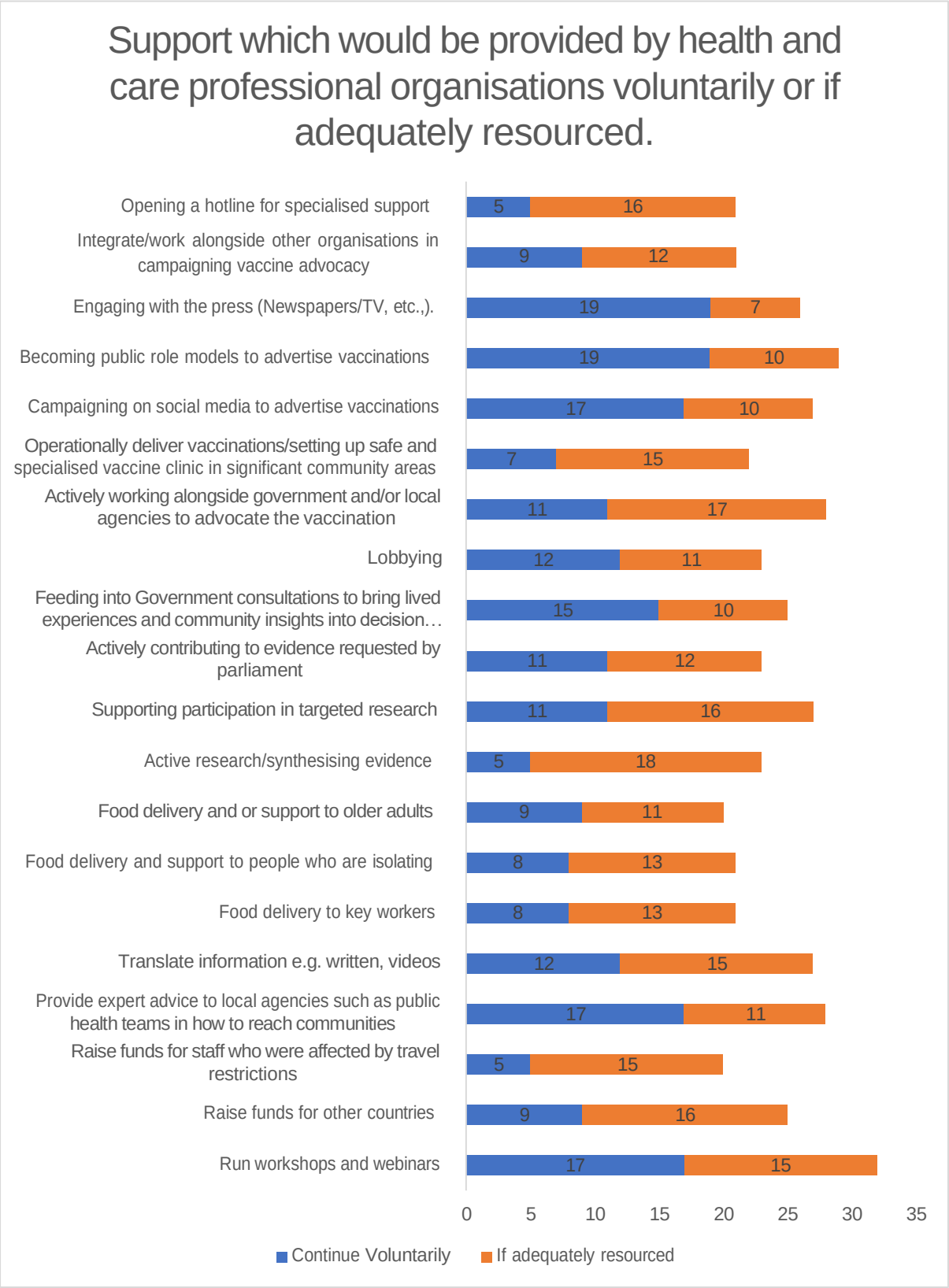


Figure 4: Support health care professionals would be willing to provide in the community if resourced adequately

Recommendations 7-10 harness the strength of professional networks ensuring recognition, sustainability, and independence as central.

3.4 *Barriers and facilitators of credible community engagement*

- **Minoritized communities have unique reasons for vaccine hesitancy. For those with genuine concerns, it is important to create safe spaces to explore issues, rather than fuelling further marginalisation.**

COVID vaccine confidence, as described above, was helped through the wide range of initiatives led by minority ethnic health and care professional networks. The independence of these networks was seen as a bridge between healthcare providers, commissioners, and government though not without some stigma for the professionals acting as vaccine advocates.

Community members described many additional levers to vaccine uptake, including the messaging around vulnerability and ability to continue in employment. However, community leaders in particular spoke firmly about the need not to marginalise those who were vaccine hesitant but to work with them to support openly and transparently address information needs and respecting decisions.

> *"…the news at the time was like, anyone who is severely affected by COVID or perhaps has died from COVID has quote unquote underlying issues, and everyone understood what that meant, which was, this is someone who's already sick in some way or already marginalised within society, marginalised from the health care service in some way and their death is therefore inevitable…"*
>
> **Female, 35, Asian Indian, Community Leader**

> *"…my cousin, who's a Physio in France, she was told that if you don't get the vaccine, you cannot work, and she had to do it."*
>
> **Female, 42, Black African, Public Member**

"…some of them did go down the route of just accepting they had to take it if they wanted to keep their jobs. So, they had to take the vaccination, some of them resisted not taking the vaccination and therefore, some of them did lose their jobs, we heard about three or four ladies that resisted and therefore had to resign. Funnily enough they have gone back to their previous jobs now that the kafuffle has died down."

Female, 52, Black African, Community Leader

"It could have been framed in so many different ways, if your vaccine hesitancy is a serious thing, you don't need to draw it along racial lines, so that shaming of people who didn't get vaccines also allowed people to kind of dig their heels in and go, why are they so desperate for us to get it, this feels even more suspicious now."

Female, 35, Asian Indian, Community Leader

"…I say it's all about empowering people, you can't force people to take the vaccine, I discovered that. I didn't discover that, but I know that, but it's more about giving people information and helping them making informed choices."

Female, 52, Black African, Community Leader

"…as soon as you have the information, I respect the fact that you don't want to take it for whatever reasons you have and the information that you have is correct rather than relying on myth and conspiracy theories. As long as you have the information, you make the choices for yourself and your family, whatever decision you make I will respect that because I am not here to judge you, that is not my role."

Female, 52, Black African, Community Leader

The alternative of having a positive discourse was suggested to be the continued demonisation of anti-vaccination ideas and further polarisation of views. The best way to engage was to provide clear, transparent, and dispassionate information and answer any questions or address issues which the communities are concerned about in a non-judgemental setting, by informed experts. Information which has been tailored to different communities was seen as necessary for facilitating this type of engagement with the community.

"…sometimes when someone forces you, you get to think are they planning something?

Female, 31, British Muslim, Public Member

> *"…they [the GRT community] were obviously really concerned and quite worried, but several of my families are not particularly literate, so those visuals were really important, those personal conversations were really important…"*
>
> **Female, 52, Gypsy, Community Leader**

> *"…we were always unbiased in terms of political perception and this one was really, it was really clear for us that the community is really divided, and we didn't want to put anyone off because if we didn't want to be identified as a public health, we are independent, we can help a public health like we've done. So, we visited those workforces, and we help them collect the data, we have to ask questions and I think it was working really well."*
>
> **Male, 38, White Other/ Polish, Community Leader**

3.5 *Broadening the reach of community engagement for future public health*

- **Despite the large efforts of made by minority ethnic health and care professional networks and organisations to support COVID vaccine uptake, there were community members and community leaders who did not know about the scale of support and some who had no awareness of the networks.**

Survey respondents reported the amount of support given by health and care workforce within communities. Some of this was directed to other professional peers only (5.9% agreed that all support went to peers), 14.7% agreed most support was given to peers with only some to the community, but the majority (47%) agreed the amount of support was equal, and 32.4% agreed their organisation provided more support to the community than its peers. Despite this positive work, some members of the community i.e. lay people, did express a lack of awareness. This highlights the need for an increase the visibility of the effort in recognition of work undertaken as well as moving forward if networks are to be effectively utilised for future public health priorities.

> *"Erm, no, because there was a shortage. There was a shortage of the health care professionals so I don't know what might have happened in my community to help".*
>
> **Female, 34, British Bengali, Public Member**

> *"Erm, I haven't come across things like support in the community".*
>
> **Female, 31, British Muslim, Public Member**

> *"Not GP's. Not anyone [referring to additional support on COVID vaccine information needs".*
>
> **Female, 62, Kashmiri, Public Member**

> *"Just get text messages from doctors you know. You are vulnerable, stay safe. That's it basically".*
>
> **Female, 31, British Muslim, Public Member**

- **A contributing factor to the issue of reach of initiatives was the perceived othering of those who were not intended recipients of this.**

Some interview respondents, both community members and health and care professionals reported that information was prioritised for specific populations to support vaccine uptake.

> *"…obviously I don't fall into that category of erm an urgent person that needs the vaccine, so it was the person, it was the people that needed it like vulnerable people…"*
>
> **Female, 34, British Bengali, Public Member**

Others, who received information through family, mentioned that the local place of worship only provided education and vaccine encouragement to the male members of the family. No additional support groups or information was provided to target female members of the community.

> *"But at the Mosque they just informed all the men who attended. [Brother-in-law] got information while he was there. I didn't get information sent at home."*
>
> **Female, 40, Bangladeshi, Public Member**

It was also expressed that information available was not suitable for those living with a diagnosed learning disability. More could have been done to target those in the community, especially those living with multi-vulnerabilities.

> *"…it took public health eleven weeks and three days to mention the word learning disabled or autism in anything they produced from the point of lockdown. Eleven weeks and three days."*
>
> **Female, 42, British Pakistani, Health and Care Professional Representative**

In many cases this was due to the guidance and information about the pandemic experiencing a delay in translation, or translation was not widely accessible.

> *"At the actual vaccine centre, I think they could have had, like, language, so basically like leaflets or in different languages to support all the different people at such different communities".*
>
> **Female, 60, British Asian, Public Member**

> *"…one of the reasons why there was so much confusion and people didn't know what they were supposed to do was that in terms of people who don't speak English very well. There was a huge delay in terms of translating and not accessing other support you are describing."*
>
> **Male, 38, White Other/ Polish, Community Leader**

4. Conclusions

Minority ethnic health and care professional networks and organisations undertook a major role in bridging the gap between health care providers and services and the communities they serve during the COVID-19 vaccine rollout. Although difficult to quantify, it is clear that many professionals contributed additional voluntary hours, with 70% of those surveyed spending 4 hours or more a week during the height of vaccine roll out to support community confidence and safeguard overall health and well-being amongst marginalised groups. Support was multi-faceted, aimed at communities and peers, and clustered into three main types- scientific evidence, education, and active interventions to support vaccine uptake. Though representatives and communities are supportive of this partnership in future, there is a need to increase visibility, increase resource, and to maintain a degree of independence from public health organisations to mainly overcome longstanding systematic drivers of health inequity.

Withstanding sample size issues, the research has provided a holistic overview of the perspectives of professionals and community, resulting in a series of actionable recommendations that support the landscape of policy towards utilising community asset based resources, with the networks in question being a key attribute of this, though often understudied.

5. Photovoice- A window into the value added to minority ethnic communities from trusted health care professionals during a time of national crisis

"I trust in my faith to guide me always. And, when I need it, I equally trust voices in my community to help guide me as worth their weight in gold. This is what taking time to support our communities in this global pandemic has meant".

Female, Indian, Hindu, 72, Public Member

"Running the race alone is no fun. We don't want anyone left behind, so we do what we do, despite the human cost personally. Supporting all communities to have the best chance of winning the race of good health."

Male, 44, Black African Health and Care Professional Representative