

**University of
Northampton**



Exploring Covid-19 Vaccine Confidence in low uptake areas and populations in Peterborough and Cambridgeshire

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“ What you said ”

Community Members

I believe that the vaccines ingredients didn't have enough research. (Eastern European)

I had my 2 doses of Pfizer vaccine, and as situation is unclear now if those 2 doses and booster would protect you from catching Omicron and future variants of Covid-19. I am not happy to get any more doses until there is confirmation future doses would give me proper protection. I get ill with Covid and gone through having a flu. So have some natural antibodies now too. (White British)

I am aware of things on social media, however, I often feel it is not a credible source of information. The information can quickly become dissolved on social media making it difficult to separate fact from fiction (Eastern European)

I am not for or against, if I will need to travel I will get the vaccine. (Eastern European)

Community Liaisons

I think the more we talk to people, the more we can get them to change their minds or maybe think about it twice.

And, of course, it's not helped with all the misinformation about it ...they inject a 5G microchip or all this sort of thing. And people who don't believe in a vaccine will find any excuse to prove their argument really.

...the booking sites have been wild at times, you come to book a vaccine and it gives you a site that's 20 miles away - it's not do-able. It's just not.

So there's a little bit of a sense that the Health Authorities believe there's one true answer and the answer is to get the vaccine. And that's a challenge because there's a sense that if you don't agree with that, there's not a way to have your voice heard.

Challenges of delivering the vaccine programme

Conflicting messaging

Inconsistent messages between local and national government
Changes in vaccine and Covid-19 guidance

Getting the right message

Not putting pressure on people
Range of languages required
Engaging in conversations not a one-way dialogue
No one method can work for everyone

Building relationships

Time and local knowledge needed to build relationships
Changing planned activity (e.g. vaccine bus visit) could damage local relationships and lose trust

Business relationships

Supporting larger organisations to enable staff time for vaccinations and isolation
Different local and national policies for larger organisations
Transitory nature of many workers in the region

¹Please note the quotes are provided as examples of what was reported by our participants and are not representative of all those who took part.

Vaccine confidence factors

A number of key factors can impact negatively or positively in the way in which patients make decisions regarding vaccination. Such factors are fluid and changeable

TRUST

Trust in health professionals, in official communication channels, in science, but also in one's own immunity

COMMUNICATION

Consistent, coherent, and effective communication from trusted official source; at the national and local/community level

RISK

perception of risk and willingness to take risk, or risk aversion in regard to both vaccination and Covid infection

COLLABORATION

Effective, multidisciplinary collaboration between health professionals, GPs, social care and community workers, and local authorities

SAFETY

Perceived safety of the vaccine and how the vaccine was developed; long-term effects

ACCESS

Ease in booking vaccine; ease in accessing vaccine centres; literacy level to access the information provided

COMMON FACTORS

Both vaccinated and unvaccinated participants stressed:

- Freedom of choice
- Personal responsibility
- Effective communication and information
- Importance of trusted sources
- Role of families, peers, and employers

RECOMMENDATIONS

Enhancing vaccine confidence is part of a multi-dimensional and multi-professional approach to providing health services across the region. Evidence from the project leads to recommendations which have the potential to achieve a wider impact on other present and future health challenges

<h3>EFFECTIVE COMMUNICATION</h3> <ul style="list-style-type: none"> • Establish a single authoritative and trusted source • Monitor consistency and coherence of content to avoid contradictions leading to confusion • Ensure content is appropriate to level of literacy and native language 	<h3>MULTIDISCIPLINARY COLLABORATION</h3> <ul style="list-style-type: none"> • Sustain and develop the multi-professional collaborations established during the C19 crisis • Sustain the collaboration with community-based, employers and other stakeholders services created during the C19 crisis
<h3>EDUCATION</h3> <ul style="list-style-type: none"> • Support initiatives to develop health education for adults and children about vaccines • Educate the general public about the workings of health, social services and local authorities in response to C19 crisis 	<h3>COMMUNITY - BASED SERVICES</h3> <ul style="list-style-type: none"> • Sustain and develop the role of community-based services by drawing on their expertise and knowledge • Enhance their role as brokers, facilitators and liaison with members of diverse communities
<h3>INCLUSION AND DIVERSITY</h3> <ul style="list-style-type: none"> • Sustain and develop the current approach to engage with diverse and mobile groups • Enhance the collection and sharing of population data 	<h3>EVIDENCE-BASED DECISION MAKING</h3> <ul style="list-style-type: none"> • Develop systems for the systematic and ongoing evaluation of initiatives • Develop protocols for data collection and sharing across services • Involve all stakeholders including members of the public in decision-making

Executive Summary

The project, commissioned by the NHS Cambridgeshire and Peterborough Clinical Commissioning Group (CCG) in collaboration with Cambridgeshire County Council and Peterborough City Council, aimed to gain greater insights into Covid19 vaccine hesitancy in lower uptake areas and specific populations in Cambridge City, Peterborough City and Fenland, to inform ways of enhancing confidence and vaccine take-up.

Aims and objectives

The following project objectives were identified:

- To gather a deeper and more nuanced understanding of the personal, cultural and social barriers in low uptakes areas and population groups including 'white other', 'other ethnic groups', migrant workers and 50+ users face in taking advantage of vaccination programmes;
- To identify motivational factors and practices which funders and sponsors can use to modify individual's attitudes and behaviours;
- To provide fact-finding and evidence-based recommendations for practice.

Methods

The project included three phases. Phase 1 was an initial 'fact finding' with local authority and NHS staff to rapidly assimilate current local 'soft intelligence' on vaccine hesitancy, identify strategies to date to boost vaccine uptake and to inform the next stages including identification of participants. This was followed by Phases 2 and 3 during which a deeper and more nuanced understanding of participants' personal, cultural and social barriers were gathered, and for which the data was a formal part of the project.

In total, the project gained evidence through a survey, interviews and focus groups from a total of 162 participants, including 12 representatives from across Cambridgeshire and Peterborough representing the Local

Authority, Public Health, GPs, and the Voluntary Sector; 13 community liaison leads; 115 questionnaire responses, and 20 members of the community as the main target population.

Key findings

The evidence confirms findings from international literature showing that vaccine hesitancy is a complex phenomenon in which a number of factors contribute to vaccine hesitancy or confidence.

Evidence from community members in particular show that vaccine hesitancy should be viewed on a flexible continuum in which their views are not fixed.

The current study identifies that while diverse groups of people have specific needs, their attitudes towards vaccination are not necessarily determined by the group they belong to.

The study shows that there is evidence of community liaisons, local authorities and NHS staff having used a multi-dimensional and flexible approach while being forced to adapt to fast changing situations on the ground.

A further insight of the study shows that even vaccinated individuals are no less sceptical, wary and confused about the information they received about the pandemic and the vaccine itself.



Key factors

A number of key factors can impact negatively or positively the way in which community members make decisions regarding vaccination. Such factors are fluid and changeable:

- **Trust** - Trust in health professionals, in official communication channels, in science, but also in one's own Immunity;

"I trusted our scientists and medical professionals to produce a vaccine that was as safe as possible given the speed with which it needed to be available." (Community member)

- **Risk** – Perception of risk and willingness to take risk, or risk aversion in regard to both vaccination and Covid infection;

"I wasn't sure whether I wanted to take the vaccine because I didn't mind going through symptoms of Covid in case I would get it. However, when I heard that people who have problematic health conditions and elderly would have worse symptoms, it changed my mind because I wouldn't want to pass on an illness ..." (Community member)

- **Safety** – Perceived safety of the vaccine and how the vaccine was developed and its long-term effects;

"I believe the vaccines are dangerous and the propaganda campaign to have experimental vaccines wrong." (Community member)

- **Communication** - Consistent, coherent, and effective communication from trusted official sources, at the national and local/community level;

"We were given good information and advice why we should take vaccination. Our community had good Covid coordinators who gave the most updated advice on Covid 19 &

vaccination. The information came from NHS Doctor who is part of our Covid team." (Community member)

- **Collaboration** – Effective, multidisciplinary collaboration between health professionals, GPs, social care and community workers, and local authorities;

"...work in partnership, aligning priorities, collaborating where it makes sense to do so and where there is agreement to do so. It's looking at this partner-wide style of working, working with our communities rather than doing things to them is very much the essence of the role." (Community liaison)

- **Access** – Ease in booking vaccination; ease in accessing vaccine centres; literacy level to access information provided.

"So, they can't get appointments, they don't know how to use the booking system or can't access the booking system; appointments aren't available at the right time, mixed messaging around bookings." (Community liaison)

Challenges of delivering the vaccine programme

- **Conflicting messages** – Inconsistent messages between local and national government; changes in vaccine and Covid-19 guidance;
- **Getting the right message** – putting pressure on people; the need to deliver the message in multiple languages; engaging in conversation rather than just sharing information; adapting the message to the target group;
- **Building relationships** – Time and local knowledge needed to build relationships; consistency with planned activities (e.g. vaccine bus visit) to avoid damaging local relationships and trust;

- **Business relationships** – providing support to larger organisation to enable staff time off for vaccination and isolation; coping with different local and national policies for larger organisations; transitory nature of many workers in the region, including highly mobile academic and student population.

Key recommendations

Recommendations focus on access and participation with the vaccine programme, to continue to develop inclusive approaches to communication and support which foster access and participation, which meet generic, group specific and individual needs of community members.

In regard to access, both physical access to vaccination facilities and access to knowledge and information about the vaccine, it is recommended that the extensive work already carried out and the knowledge and expertise developed in regard to effective means and channels of communication continues and is developed further as a way to cope with a possible Autumn vaccination initiative, but also in regard to other future and ongoing health initiatives.

In regard to fostering participation, it is recommended to foster two closely related aspects of participation, that is, the involvement of community members as key stakeholders in the development,

implementation and evaluation of policies and practices the involvement of community members as respected and valued decision makers independently from their views about the vaccine, and providing educational opportunities.

In regard to communication, it is recommended that communication teams continue with their best practice work of using different formats/approaches, working through local organisations and trusted individuals and providing materials in different languages. The report also acknowledges the challenges in responding locally with nationally agreed communication strategies. Consideration could be given to priorities that enable face to face engagement, messaging from health professionals, or coproduced communications through collaborations with local communities. The emphasis could be placed on encouraging a two-way communication to enable different sides of the vaccine debate to be considered. Further recommendations relate to the timely address of misinformation and fears of the vaccine (e.g. how the vaccine was developed in the time frame, impact on immune system, value of having a booster with so many still getting Covid) and showcasing the positive impacts of the vaccine (e.g. how time off for staff is lower, customer confidence increased) can highlight benefits that will resonate with businesses and individuals.

1. Introduction

This project was carried out during the Autumn and Winter of 2021/22, a time when policies, practices and measures to cope with the Covid-19 pandemic were undergoing major changes. After almost 2 years of pandemic, the focus at the beginning of the Autumn was on ensuring the uptake of 1st and 2nd vaccine doses, together with a raised awareness of increasing flu vaccination. In this regard, data available at the time showed areas of the region and specific populations where vaccine uptake was low. As the project was underway, the spread of the Omicron variant in the late Autumn impacted on the existing plans as it was now a priority to continue with the vaccination programme, but also to deliver a Booster programme in a short period of time prior to Christmas.

The brief outline of the above changes impacted on the project in a number of ways. On the one hand, it required flexibility and adaptability of the practical means and challenges of gathering data, while on the other, it was required remaining focused on the main aim of the project which stressed the importance of understanding the factors influencing hesitancy and confidence in vaccine uptake.

As the project developed, it became evident that understanding community members' vaccine attitudes, opinions and behaviours rested on an understanding of the 'vaccine ecology', that is, the combination of policies, practices, and activities on the ground and their impact on people's experiences and on changing their views. Attending weekly and fortnightly meetings of the Vaccine Confidence Steering Group, the Community Engagement – Vaccine Confidence group and the Cambridge Vaccine Access Group helped the Team to gain a broader and richer understanding of how vaccine policies were implemented, the programmes and initiatives carried out and the ever changing challenges encountered.

This report describes the steps taken to address the needs of the commissioning body and partners in the project, and the rich results drawn from the University Team's engagement with diverse stakeholders at the forefront of policy development, decision-making and public engagement, and ultimately, with members of the community to gain their views about the Covid vaccine.

The report is divided in a number of sections starting with a brief overview of research on vaccine hesitancy and confidence. Knowledge from research was used to establish a collaborative approach to support the design of the project and the methods of data collection. The finding sections report evidence from the diverse groups of stakeholders and participants leading then to a discussion and final recommendations.



2. Background: evidence from research

The development of vaccines has been one of the greatest scientific successes in fighting vaccine preventable diseases (VPD) and in ensuring equal opportunities to a healthy life (The Royal Society/The British Academy, 2020). The speed with which a number of Covid-19 vaccines have been developed and rolled-out has been unprecedented. Yet, as the World Health Organisation (WHO) (2019) warns, vaccine hesitancy is still one of the top 10 threats to global health, even more so within the current ongoing Covid-19 pandemic.

Vaccine hesitancy is not a new phenomenon and therefore not unique to the Covid-19 pandemic. While recently much media and research attention has focused on the anti-vaccination, or anti-vaxxer movement about the MMR vaccine, hesitancy about vaccination has a longer history starting with resistance to the Vaccination Act 1853 which made Jenner's smallpox vaccine compulsory (The Royal Society/The British Academy, 2020). The then argument that compulsory vaccination infringed personal liberty and free choice is still valid today as one of the possible reasons for vaccine hesitancy and refusal.

Vaccine hesitancy is a complex phenomenon because, as Dubé, et al, (2013: 1764) argue, 'models are often rooted in individual studies and because of the complex interaction of different social, cultural, political and personal factors in vaccine decision, it is hard to have a clear picture of the range of possible attitudes about vaccination'. Despite such confusion and in acknowledging the complexity, WHO (2014: 7) in its Report of the SAGE Working Group on Vaccine Hesitancy states that vaccine hesitancy 'refers to delay in acceptance or refusal of vaccines despite availability of vaccines services. Vaccine hesitancy is complex and context specific, varying across time, place and vaccines. It is influenced by factors such as complacency, convenience and confidence' (see Fig. 1.1 below). It adds that 'Vaccine attitudes can be seen on a continuum, ranging from total acceptance to complete refusal. Vaccine-hesitant individuals are a heterogeneous group in the middle of this continuum. Vaccine hesitant individuals may refuse some vaccines, but agree to others; delay vaccines or accept vaccines but are unsure in doing so' (8).

There is no dearth of research on vaccine hesitancy, and even more so since the beginning of the pandemic. The research is complex and diverse, focusing on both global (e.g., Faezi, et al., 2021; Sallam, 2021) and local UK context (Freeman, Waite, et al., 2020; Murphy, et al., 2020; Robertson, et al. 2021; Sonawane, et al., 2021), drawing from diverse disciplines, such as health, psychology (Freeman, Loe, et al., 2020), medical anthropology (Kasstan, 2020), and making use of a variety of methodological approaches and data collection methods, although systematic reviews and meta-analysis (e.g., Aboelsaad, et al. 2021), and large surveys are the most prevalent (e.g., Murphy, et al., 2020; Robertson, et al., 2021). While large scale national and global surveys have an important role to play, qualitative data from small, localised and population targeted projects (e.g., Knights, et al., 2021) can provide more focused and useful data for addressing vaccine hesitancy in specific areas. It is important to add to the list, a number of studies which have focused on the role of social media in providing information, but also mis- and disinformation (Basch, et al., 2021; Chadwick, et al., 2021; Jennings, et al., 2021; Puri et al, 2020) reinforcing conspiracy theories and adding to the challenge of health services and government to provide clear information in what is otherwise an uncertain, fluid and contradictory context of health information.



Table 1: Working Group Determinants of Vaccine Hesitancy Matrix

<p><u>CONTEXTUAL INFLUENCES</u> Influences arising due to historic, socio-cultural, environmental, health system/institutional, economic or political factors</p>	<ul style="list-style-type: none"> a. Communication and media environment b. Influential leaders, immunization program gatekeepers and anti- or pro-vaccination lobbies. c. Historical influences d. Religion/culture/ gender/socio-economic e. Politics/policies f. Geographic barriers g. Perception of the pharmaceutical industry
<p><u>INDIVIDUAL AND GROUP INFLUENCES</u> Influences arising from personal perception of the vaccine or influences of the social/peer environment</p>	<ul style="list-style-type: none"> a. Personal, family and/or community members' experience with vaccination, including pain b. Beliefs, attitudes about health and prevention c. Knowledge/awareness d. Health system and providers-trust and personal experience. e. Risk/benefit (perceived, heuristic) f. Immunisation as a social norm vs. not needed/harmful
<p><u>VACCINE/ VACCINATION-SPECIFIC ISSUES</u> Directly related to vaccine or vaccination</p>	<ul style="list-style-type: none"> a. Risk/ Benefit (epidemiological and scientific evidence) b. Introduction of a new vaccine or new formulation or a new recommendation for an existing vaccine c. Mode of administration d. Design of vaccination program/Mode of delivery (e.g., routine program or mass vaccination campaign) e. Reliability and/or source of supply of vaccine and/or vaccination equipment f. Vaccination schedule g. Costs h. The strength of the recommendation and/or knowledge base and/or attitude of healthcare professionals

Fig. 1.1 Table 1: Working Group Determinants of Vaccine Hesitancy Matrix (Source: WHO, 2014: 12)

Despite such diversity, it is possible to identify common threads both in relation to the explanation of vaccine hesitancy and in regard to recommendations on how to ensure vaccine uptake and more effective health services (see for example, ECDC (2017) Catalogue of Interventions Addressing Vaccine Hesitancy). In regard to migrants' vaccine hesitancy, in addition to common factors summarised in the WHO's (2014) '3Cs' model (see Section 6), specific factors related to migrant status need to be considered, such as social processes and practical issues related to access to health services, trust in health services and government (Crawshaw, et al., 2021; Knights, et al. 2021). Similar reasons for low vaccine uptake were found in regard to black and other ethnic minorities (Nguyen, et al, 2022). In all cases, ensuring uptake of vaccination is both a health concern, but also one of tackling health and social inequalities. In this regard, research shows that vaccine hesitancy occurs more often in already marginalised and/or excluded groups comprising specific ethnic groups, migrant workers, and members of the community from low socio-economic backgrounds.



3. Methodology and methods of data collection

3.1 Project aims and objectives

The project aim was to gain greater insights into Covid-19 vaccine hesitancy in lower uptake areas in Cambridge City, Peterborough City and Fenland, to inform ways of enhancing confidence and vaccine take-up.

Initially, the following project objectives were identified:

- To gather a deeper and more nuanced understanding of the personal, cultural and social barriers in low uptake areas and population groups, including ‘white other’, ‘other ethnic groups’, migrant workers and 50+ users face in taking advantage of vaccination programmes;
- To identify motivational factors and practices which funders and sponsors can use to modify individual’s attitudes and behaviours;
- To provide fact-finding and evidence-based recommendations for practice.

3.2 Mobilising knowledge: a sequential approach to knowledge creation

As mentioned in the introduction, the project spanned a 6-month period during which policies and practices regarding vaccination changed to adapt to the spread of the new Omicron variant, but also covered the impact that various measures were having on the vaccination uptake. Such changes influenced the way in which the project needed to adapt a flexible and supportive approach to data collection which while remaining focused on the original aims and objectives was also able to accommodate to changes on the ground. Ultimately, the University team took a stakeholders’ focus approach to delivering research with impact.

The most appropriate approach was one grounded in knowledge mobilisation and its effectiveness. In fulfilling this aspect of the project, Ward’s (2017: 488) ‘Why, whose, what and how’ framework for knowledge mobilisation was adopted and adapted to suit the changing needs of the commissioning body and stakeholders (see Figure 3.1). Knowledge mobilisation (KMb) is a newer term and approach to the procurement, creation and dissemination of knowledge which has been developed and implemented mainly in the field of Health Sciences and specifically to ‘What works’ centres. KmB is part of a range of terms describing various processes of knowledge creation, such as knowledge transfer or knowledge exchange (see Shaxcson, *et al.* (2012)), and refers to moving available knowledge into active use (Ward, 2017). In fulfilling this purpose, KmB views the process of creating and using knowledge within an ‘evidence ecosystem’ which, Best and Holmes (2010: 148) explain,

‘is best understood as a complex adaptive system, whose theoretical underpinnings are: systems are dynamic and constantly changing; systems themselves exist within other, interdependent systems (e.g. individual, organisation, community); changes in one part of the system can have unexpected changes in other parts of the system’.



Fig. 3.1: Ward’s Knowledge mobilisation’s framework

The project included three phases (Fig. 3.2). Phase 1 was an initial ‘fact finding’ with local authority and NHS staff to rapidly assimilate current local ‘soft intelligence’ on vaccine hesitancy, identify strategies to date to boost vaccine uptake and to inform the next stages including identification of participants. This was followed by Phases 2 and 3 during which a deeper and more nuanced understanding of participants’ personal, cultural and social barriers was gathered, and for which the data was a formal part of the project.

Table 3.1 below clarify the terminology used in this project with regard to participants.

Participants	Definition	Purpose
Fact finding participants	NHS and Local Authority staff	To rapidly assimilate current local ‘soft intelligence’ on vaccine hesitancy, identify strategies to date to boost vaccine uptake and to inform the next stages including identification of participants
Community liaisons	Members of charities and other community-based organisations	To gain their views about factual evidence of vaccine roll-out, effective practices and challenges, identification of community members, and recommendations
Community members	Any member of the community in the areas under research	To gain their views about the vaccine, what worked, what challenges they faced and recommendations for future practice

Table 3.1: Definition of participants and their involvement

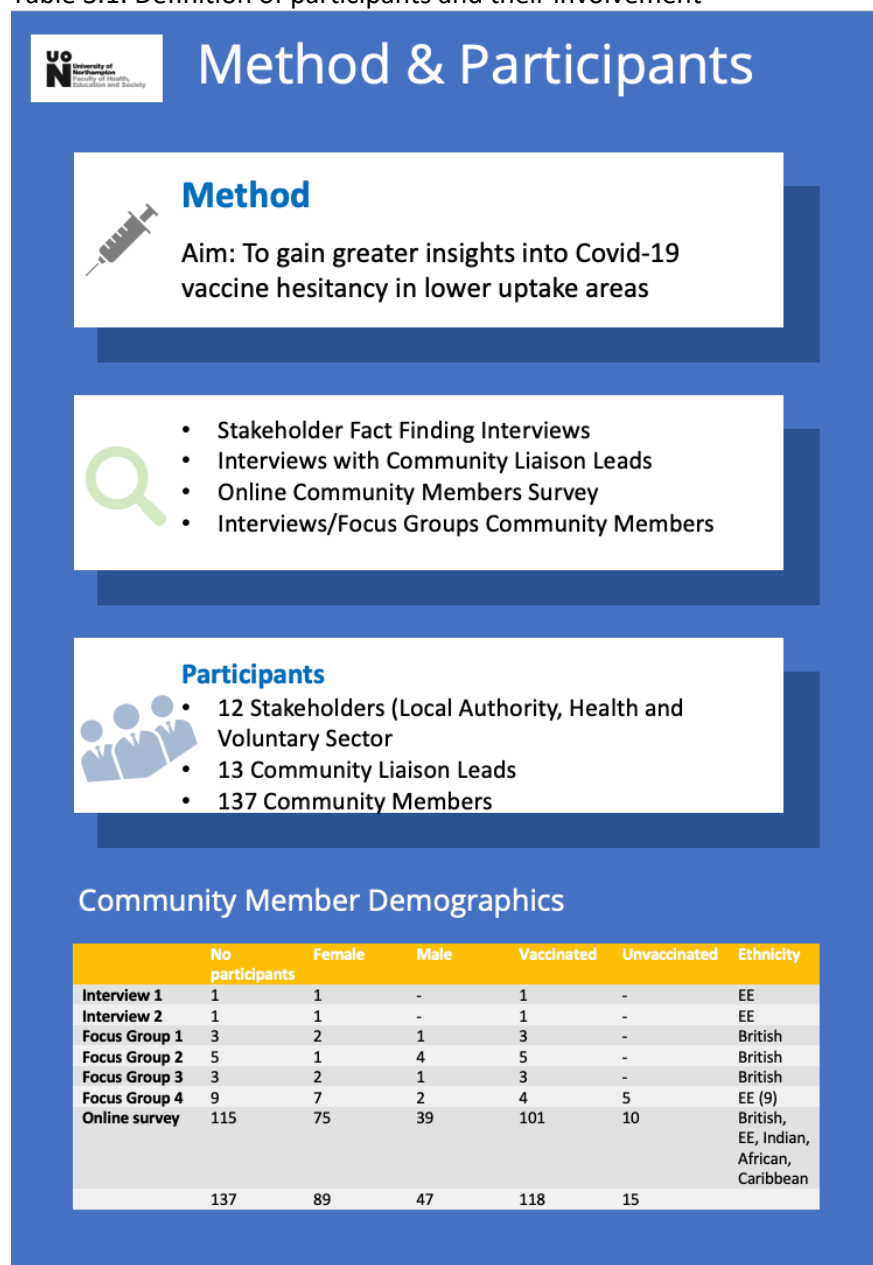


Fig. 3.2 – Overview of methods and participants

3.2.1 Phase 1: Initial ‘fact finding’ and in depth understanding

During this initial fact-finding stage, the University Team spoke with 12 representatives from across Cambridgeshire and Peterborough representing the Local Authority, Public Health, GPs, and the Voluntary, Community and Social Enterprise (VCSE) Sector. These provided an overview of the work being undertaken to engage with communities and promote the vaccine programme. These were undertaken as informal interviews and data from this stage has fed into the team’s approach for stages 2 and 3 and to inform the background and understanding of the issues to date. To support this stage, the team have also regularly attended the Vaccine Confidence, Vaccine Access Partnership and Community Engagement meetings alongside an Enhanced Response Area Webinar and a Vaccine Confidence Conference.

Due to the important nature of the conversations with staff leading the vaccine response in Peterborough, Fenland and Cambridge, the team sought ethical approval to include the notes from four of these fact-finding conversations as part of the data. Ethical approval was sought to share the notes made during these discussions and ask staff if they were willing for the notes to be used as part of the research. Staff were provided with an opportunity to review, amend or add to the notes and to confirm their participation in the formal part of the research. The team were able to include two notes as part of the data.

3.2.2 Phase 2: Focus Group with Community Liaisons

The aim of this phase was to conduct focus groups with 15 key stakeholders and community liaisons to gain an insight into the vaccine programme activity and to support plans for engaging with community members. Initial contact was made through the Local Authority leads in Cambridge, Peterborough and Fenland who had oversight for the activity and engagement work in these three areas. An information sheet was created by the University team to share through these leads and via the meetings attended to promote interest in the project. Recruitment was also supported by the project steering group.

Due to the changing environment in which this project took place, with a new variant, Omicron, the introduction of Cambridge City and Peterborough City as an Enhanced Response Area (ERA) and the introduction of the booster programme, it was not possible to undertake regional focus groups as planned. The team therefore undertook individual interviews or interviews in pairs. The team recruited 13 individuals whose role was to engage directly with community members to promote vaccine uptake. These individuals represented the Districts in Peterborough, Cambridge City, South Cambridgeshire and Fenland, and the voluntary sector. Their demographic remit varied from youth, prison sector, refugees, women seeking refuge, homeless community, social care, those with a drug or alcohol issue, and different ethnic communities such as Eastern European. All interviews were undertaken virtually via Teams and averaged 33 minutes (range: 25 mins to 1hour 18 mins). A discussion guide was drafted and agreed with the project steering group. The discussions were audio recorded and transcribed for analysis.

3.2.3 Phase 3: Community Members

The aim for this phase had been to recruit community members to take part in up to 12 1-hour focus groups, either virtually or in person. A discussion guide was designed by the University and agreed with the project steering group. This was also informed by the interviews during Phase 2 and translated materials were offered at all stages of engagement with the community. However, following feedback from the Phase 2 interviews, it was recommended that there might be challenges in recruiting to a focus group as many members may not trust the process and would also have concerns about being recorded. It was suggested that the team start with an online survey to ask two or three key questions and to recruit potential focus group participants at the end of the survey.

Online Survey

An online survey was designed to capture three key open questions about the experience of the vaccine, sources of information and information that participants would have liked to hear. The survey also included questions about participant's demographic profile to include, age, gender, vaccination status, employment status and ethnicity. This survey was set up on Online Surveys and was run from 4th January to 7th March 2022. The survey link was shared via a short information sheet and QR code to ensure easy access. This was promoted through the Vaccine Confidence group, individuals interviewed during Phase 2, through a communications toolkit generated by Cambridgeshire County Council. After data cleansing, the survey received 115 completed responses. A demographic profile of respondents can be found in Section 5.

Focus Groups

From the online survey, 40 participants reported an interest in taking part in a focus group to explore issues raised in their survey further. All participants were contacted and invited to take part in one of three online focus groups arranged at different times and on different days to provide a variety of options to support participation. Two participants had stated they were not vaccinated and were invited to a separate interview, neither responded to this invitation. Fourteen participants agreed to take part in a focus group, and 11 took part (three in the first group, five in the second group, and three in the third group). In addition, a focus group was arranged with representatives from the Lithuanian community in Peterborough. An in-person group was arranged with nine members attending. This group was led by a Lithuanian speaker who was provided with the questions and ethical approvals in advance. All groups were audio recorded and transcribed for analysis. In total 12 female and 8 male participants took part. Focus group discussions lasted on average 1hr 1 minute (range: 50 mins -1hr 20 mins). A further two interviews were undertaken with community members who had been recruited through Phase 2 of the project via community leads, these were with two female participants, with discussions averaging 33minutes (range: 31 mins and 35 mins). Table 3.1 below summarised the demographics of focus groups and interviews participants.

Table 3.1 Community members' demographic information: focus group and interview

	No participants	Female	Male	Vaccinated	Unvaccinated	Ethnicity
Interview 1	1	1	-	1	-	EE
Interview 2	1	1	-	1	-	EE
Focus Group 1	3	2	1	3	-	British
Focus Group 2	5	1	4	5	-	British
Focus Group 3	3	2	1	3	-	British
Focus Group 4	9	7	2	4	5	EE (9)
	22	14	8	17	5	

3.3. Analysis

Data obtained via the interviews, focus groups and the open text questions from the online survey were analysed thematically, using Braun and Clarke's (2006) six steps of thematic data analysis (1. Familiarisation; 2. Generation of initial codes; 3. Searching for themes; 4. Reviewing themes; 5. Defining and naming themes; 6. Write-up of themes). A thematic framework was created, and data was analysed to provide an account of the key themes that were of importance to participants in relation to supporting decisions to take the vaccine, information and ways of engaging in the future. The demographic questions from the online survey were analysed using descriptive statistics via SPSS.

3.4 Ethics

Ethical approval for the study was obtained in stages from a University of Northampton Research Ethics Committee (REC), with initial approval confirmed in August 2021. Final approval was received in January 2022. Approval for subsequent stages was given throughout the study to cover the changes to elements of the study noted above. Governance approval for the project was gained from Cambridgeshire County Council in September 2021. Information about the project was shared with all participants prior to participation and signed or verbal consent was collected.

4. Evidence from Community Liaisons

The role of the community liaisons in supporting the vaccine programme was discussed during the interviews. While many did not have a sole focus in their role of supporting the Covid response, many had adapted their roles to encompass this as a regional priority or had been redeployed to support this work. It should be noted that the interviews took place in the Autumn 2021 at a time of change and uncertainty with the implementation of the Enhanced Response Area, rise of Omicron variant and the start of the Booster programme.

The community liaisons undertook a wide range of activities and actions that have been taken to support vaccine uptake, particularly in areas and with community groups where there has been a low level of uptake, such as within Eastern European communities, with homeless communities, travellers, care homes, and with local shops and employers. These individuals worked within larger teams and with local community groups or faith organisations to support engagement on the ground, ensuring that local government messages about the vaccine, Covid and vaccine centres were shared in the most suitable way for each community setting, be this by sharing best practice examples, handing out leaflets or speaking with individuals, or using the Making Every Contact Count approach and signposting to relevant services.

4.1 Local understanding

The community liaisons who participated in this research spoke about the need to understand each local area and communities within it to better engage with members of the public and businesses. This came from a recognition that each area works differently, has differing needs and demographic profile, employment patterns, and access to services, such as transport. It is only through this local knowledge and the 'grass roots' connections, that community liaisons could find 'ins' with community organisations or groups to engage about the vaccine programme. Examples of this partnership working was with ethnic community forums, voluntary groups, resident groups, community centres, youth charities and faith organisations, who have wide reaching connections across their communities. Some of the community liaisons spoke about ways that they filled gaps in their connections in certain areas, for example in Cambridge, it was noted that some areas of the city did not have groups to represent their interests. Therefore, work was undertaken to find some small groups to come forward and support them to disseminate information, e.g. through resident associations or WhatsApp groups, and so build those local connections.

This knowledge supported local decision making and intelligence, with community liaisons working closely with their partner organisations in the council, Public Health and CCG, as well as across the voluntary sector to provide a bottom-up approach to understanding the needs of local communities. What was identified as particularly important was how this local intelligence fed into decisions about the vaccine and how best to support access and decision making for members of the public. Although it was also noted that a top-down approach was also important to support community engagement work and ensure staff had the most up to date information on what was happening with the vaccine programme, where vaccine sites were, and what the latest guidance was on who was eligible.

So, all of that local intelligence and knowledge from the ground is what my team bring to that table.

...work in partnership, aligning priorities, collaborating where it makes sense to do so and where there is agreement to do so. It's looking at this partner-wide style of working, working with our communities rather than doing things to them is very much the essence of the role.

This collaborative approach to the vaccine programme was thought to be a strength of the work, enabling greater communication and understanding between the different agencies. However, it was also noted that there were challenges with so many organisations working together. They all have rules and guidelines to follow and therefore flexible approaches can be difficult to provide to meet individual circumstances. This was particularly noted in terms of working on the ground, where requests for information could take time to go through various approvals, and delays could result in low uptake for planned activities as leaflets did not arrive in time to market the event.

So, then you have to get permission and then higher up it has to get approved. So sometimes by the time the comms is approved the day has been scheduled in as a diary and there have been occasions where the leaflets haven't been ready and available. That has a knock-on effect because when people read it they think we don't know what we're doing!

4.2 Engagement at a local level

4.2.1 Employer engagement

One area of focus was working with local businesses and large employers. Examples were provided of visiting employers of differing sizes, engaging with managers/owners to deliver leaflets and have conversations about where to signpost staff to access vaccine sites, mask usage, or arranging for the vaccine bus to attend the premises. This engagement was perceived to be welcomed, however, some employers expressed concerns about the potential impact of having all their staff vaccinated on the same day and the knock on of having staff off ill with side effects. Some participants reported to have seen uptakes in the vaccine from staff and thought this had been a positive way to engage with businesses. It was also reported that one approach with businesses that worked well was to focus on the health and safety aspects of covid in relation to staff, with encouragement to promote vaccination as part of this remit and potential benefits of encouraging customers to feel safe.

That's been really positive, so in the last two months we've been to 17 large scale employers in Peterborough, so huge retail, distribution, those types of things, ... all these companies, and that's had contact with 26,000 employees. We're just working out what the vaccine uptake is from there but we think it's somewhere around 20%, which doesn't sound high but actually they were all non-vaccinated.

Some employers are like, 'Yes, that would be great'. But then others are saying, 'If they all have their vaccine at the same time I'm going to be without my workforce tomorrow'.

One community liaison spoke about changing their approach with businesses, explaining how they had shifted from sending out emails and social media posts to a more hands on approach. Given the multi-ethnic composition of the workforce, particularly in areas like Peterborough and Fenland, they visited and took a translator to talk directly with staff and found that this was a more positive way of engaging. Others spoke about using similar approaches and said that for the larger employers, this could take significant effort, using 30+ officers, champions, translators etc. While another community liaison explained that when engaging with smaller businesses, such as hairdressers, taking masks or sanitizers with them provided a good starting point and was a way to give something back. Generally, visiting businesses was regarded as the best approach as it enabled a two-way

conversation to take place and some reported that there could be knock on effects with small businesses being more open to sharing information with customers and being links to some communities. Hearing positive views about the vaccine from peers was an effective way to communicate.

We should have switched our communication to face to face right at the beginning because it had much better impact. Because then you are not a disembodied voice of disembodied email where nobody really knows who anybody is and they are just being told.

[A] Portuguese guy who was helping everyone and he said, 'Thank you for bringing me some leaflets and talking to me; we help the community quite a lot, they come to us to translate literature sort of talk to us'.

Box 5.1: Case Studies of Business Engagement

... we have some hairdressing settings on a street in Peterborough. Lady owns five salons, which see nearly 3,500 customers a week and she's got about 23 staff and they've been advocating not to be vaccinated for lots of different reasons. Actually, the majority of the staff were not vaccinated. They also took the route of not using protective coverings, masks and stuff, so there was a bit of regulation that forced it. Actually, two officers went and spent about two hours with this lady and her team and just said, 'Look at it in all these ways and then come to a decision'. They sat on it for a few days and then contacted our colleagues in Public Health and arranged for them to be part of a vaccine-type pod; they all got tested, they all had their first vaccine, and they are now just having their booster. What we said is actually use it as a marketing tool as long as you are not exempt. Tell our customers you are all vaccinated; tell them this is what you've got in place so they all come in and get their perms and whatever else done feeling that they're in a safer environment.

We've been working with a car wash ... that every time I went there was a different nationality member of staff there, so each time we took them some leaflets. I then took them some biscuits to share and then we drafted the letter to the manger - because we'd met the manager the very first time - saying, 'It would be really good if you let your staff get out and get a vaccine because it's only over the road and it's really beneficial to your business'.

4.2.2 Community engagement

Engagement with the local community was delivered through several different approaches. Often this was through making connections with a 'trusted' representative of a particular community, or decision maker, such as faith leaders. Engaging with these individuals provided a way to reach a wider group of people in a way where the vaccine message would be heard. This work was also supported by having translated leaflets and information to share, so as not to exclude those who were non-English speaking. Through working with community representatives and by spending time with communities, the community liaisons explained that they were able to understand the best places to go to access different groups, and to understand the issues and concerns of a community.

So we spoke to the Chairman of the Mosque. He announced it during the prayer, he was very welcoming to it. And then we made sure that the timing was right. We know that Fridays are really busy so we had it on a Friday when it was packed so we were there before and after the prayer time.

When we went out to do our engagement we tried to do in a way where we weren't singling them out but we were thinking of places where they would eat, drink, socialise, sleep, work. We tried to put our shoes into their shoes to see how someone of that background would access information to do with the vaccine and how we would be able to set up a bus there or something so they would get that access and that information, what are the barriers.

Other engagement occurred on a one-to-one basis, with community liaisons and their staff discussing access issues or vaccine concerns with individuals either in the street, door knocking, attending coffee mornings, online and in person events, food banks, attending Parish council meetings, or visiting business premises. The community liaisons taking part in this research spoke about their role as signposting to the vaccine sites, allaying fears about not being registered with a GP, updating websites, sharing communications about who could have a vaccine and to provide opportunities to speak about the vaccine, physically supporting access to vaccine sites by accompanying or arranging transport, helping those who are needle phobic, and managing calendars to remind people when to get vaccinated, and any concerns individuals had – with staff ensuring they had leaflets on hand to distribute. One approach that worked for a couple of participants was to provide access to a health professional who could respond to particular concerns and who could engage in 'myth busting' about the vaccine. One community liaison also noted that it was important to supporting people to access the vaccine while not directing their decision making. This could be by providing leaflets, or writing down bus stops to the nearest vaccine site.

So, I've seen people physically from prior engagements turning up to the buses. A lot of them do wait, they hold something in their hand, the leaflet that I've given them, and they go, 'Yes, I've got it, I've got it'

Directing people to clinics, directing people to walk-ins, directing people to their GPs if they needed a home vaccination.

So, the staff, if they are at a food bank they will always have the Vaccination on Tour leaflets with them so they can give that out and advise people on when they are eligible for the booster, when all that information comes out.

Now, that could be a formal type of event where they've got a stand, they've got all their leaflets, they are gathering intelligence from the ground. Or it could literally be them popping along to a coffee morning.

How we coach and support people to access vaccines but not tell them it's the right thing to do. So very much about the right conversations to be having.

We've been stopping drinkers in the church gardens and talking to them, asking if they've had a vaccine and did they know how to get one.

Who was delivering the vaccine message was also considered important, with some people being anxious about speaking with council staff, for example. Therefore, health professionals or a person

from a similar background were thought to provide the most trusted engagement. One individual had experienced backlash in their early work when they wore clothing identifying them as council staff, they decided to be more neutral in their clothing and found this was then easier to start conversations about the vaccine.

Making the vaccine buses more approachable was also a consideration when engaging with local communities. One individual spoke about making sure there was a female vaccinator on hand when working with the Muslim community to provide a discrete service for both men and women, or by providing seating and biscuits to keep children entertained while parents were vaccinated.

Little things like knowing the community, so making sure there's separate seating for men and women. It really helped when we [had] a lady vaccinator because a lot of the women have [tight] outfits on so they can't leave their sleeves up so they don't want to [take] the whole thing off in front of a man.

4.3 Best practice for engagement

When discussing the approaches which had worked well, the direct, face-to-face approach was thought to be the most effective. While this can take time and resources, it was thought to have the best impact in terms of seeing an uptake in vaccinations. The reasons for this related to giving time to have conversations and talk about issues that people may not otherwise have the opportunity to do. One example of this type of engagement was a meeting held with health professionals to provide time for community members to meet and have an open discussion about the vaccine. Working with translators to undertake this work was also considered a successful approach – although one individual noted that the translator was best not being a member of the community as they did not always translate the message directly. The face-to-face approach also enabled people to put a name to the face, rather than being anonymous to the community. This also allowed for greater understanding of the issues being faced by communities and how best to support them. One community liaison also explained that this was the best way to support people to think differently and try to change their minds. As an example, one community liaison spoke about concerns one group had expressed about messages from anti-vaxxers. This enabled them to arrange for the Safe Street Teams to do further engagement work and support this particular community.

Yes, so having those conversations at coffee mornings, giving a little bit of extra time to listen to what people are saying. That one conversation is reflective not of the whole community but the majority of the community, so it's good to have those conversations at ground level.

I think the more we talk to people, the more we can get them to change their minds or maybe think about it twice.

They hear [translator's] accent, they realise that she actually understands, and you get a bit more out of them. And then sometimes they'll start speaking in a bit of English as well, which is great.

Several community members discussed that the best way to start a conversation about the vaccine was to have a general chat first, not to open with the vaccine. They felt that this could be a challenging topic for some and rather than lead with covid, they found it naturally became part of the conversation and that this enabled them to then share leaflets or explore people's opinions on

the vaccine. This approach was also thought to be supported by discussions of wider issues, such as helping with benefit claims, that supported trust and the building of relationships.

The face-to-face stuff has absolutely been exceptionally good.

And then within that conversation we had leaflets on hand to say, 'If you are still interested in getting the vaccine, then there's a pharmacy literally two seconds away, over there'.

Other examples of positive approaches to delivering messages about the vaccine were through videos, with representation from different nationalities, and in one instance co-created with the target community. Others reported that they had used social media effectively, pointing people to trusted sites for information (e.g. Simple Politics), and that the vaccine buses were important as they supported those who could not travel to vaccine sites.

What was expressed by some community liaisons was that engagement was not an easy process and no one-size fits all approach worked. It was best to get to know each community and to engage in different ways, often providing a 'drip feed' approach, so as to reach people and meet their individual needs as best as possible, or to get involved and help out, for example at a food bank. Timely engagement and response to changing perspectives were also important to ensure positive engagement.

4.4 Challenges faced in community engagement

As well as discussing best practice in community engagement, the community liaisons also spoke about some of the challenges they had faced in undertaking this work. Some of these challenges related to the conflicting messages about the vaccine, and changing directives for Covid measures. The community liaisons spoke about an inconsistency between local and national government, with an example given as the central message of restrictions being removed but locally the message was to still wear masks. Additionally, changes in who could or could not get vaccinated caused confusion and made it challenging to get the message out about the vaccine, sometimes causing a 'backlash' for teams on the ground as it was perceived that they did not know what they were doing.

The Government took all of the shackles off. I know there's a few things coming back but pretty much all of the shackles removed. But remove them all but also we're still doing comms campaigns saying, 'Be cautious and wear your mask'

Other issues occurred when time had been spent building relationships with local communities and arranging for the vaccine bus to visit, only for it to be cancelled. While this may have occurred due to a change in central policy regarding a resource shift to support the booster programme, this was seen locally as a break of promised support and was felt that this led to a loss of trust that had taken time to build. Where this occurred, it was perceived to be even harder to rebuild and in some instances the community liaisons reported that the communities no longer wanted to engage with the vaccine programme.

Yes, cancelling of the buses last minute really affects the confidence in the community generally and they just don't want us to come back basically!

Those taking part in the interviews also spoke about the challenge of getting the right message across, in the right way, and making sure not to put pressure on people. This was also related to

getting the message to the right people who could cascade information, and providing it in a range of languages. It was also thought that often this sharing of information was a one-way process and did not allow for conversations to take place, especially where they felt there was a central message that needed to be communicated.

But you can't necessarily answer their questions because all we've got is the comms that come from central Government or the NHS

So we have to be really careful that we're supporting people but not bullying people into doing something that they are very afraid of.

So it has been that gentle encouragement to try and think about that and to make sure that all of our services and all of our staff have access to the most up to date information about where people can get the vaccine from, so if it does happen to come up in conversation

we are trying to just come out with a positive approach and don't pressure people into anything; just find out their reasons, have a nice conversation, maybe over a coffee or something and just see what their views are and where they are coming from.

How do you promote it to people that you don't know what language they speak? You had to put it in many different languages, but you won't have every language and it's pulling in those people. Me speaking to them, I felt that very difficult because there was the language barrier there.

Challenges relating to engagement with businesses were also discussed, these related to larger organisations, in particular, not wanting to vaccinate their staff at the same time and have then off sick with potential side effects. It was thought that some organisations may have encouraged staff to ignore symptoms and not get vaccinated in order to meet busy work schedules (with Christmas a factor at time of some interviews). The difference between national messages and local messages from national/international organisations causing some challenges to engage at the local level. Another challenge was in the transitory nature of some workers in the region and that they may not live and work in the same locality, which made it difficult to map who had been vaccinated.

There are some employers who are messaging people, sending a message through their internal media if you like, to staff, two things – one if you've got symptoms ignore them because we're really busy, you can be off after Christmas. The other one is that we don't want to promote the vaccine because people have a negative reaction to vaccines and boosters and they'll be off for days and therefore they won't be at work.

There's a lot of blurred lines and for a lot of people, we don't even know where they live. Because of the nature of their work they are all over the place.

Other challenges faced related to changes in which vaccine sites were open and managing expectations about where and when people could get a vaccine, accessing people in their own homes or in care homes, and not knowing who had or had not received the vaccine. Staff also experienced verbal abuse from members of the public and at some business locations when talking about the vaccine. Managing these encounters and protecting staff was therefore a priority for those in management positions. Finally, the door knocking approach was not always perceived to be the best way to engage, as some people found this intrusive.

But we're not delivering the thing on the other side. So, a bit like saying, 'Go and get your booster' and everybody racks up in a queue and then is turned away because either they're run out of vaccines or staff or they just don't have the vaccine centre.

[door knocking]... was intrusive a bit into people's personal spaces and we were worried about coming into their private spaces. So, we either had months of 'Yes I have had my vaccine and thank you for coming'. Or, 'No, I don't want to talk, don't ask, I don't want to talk'.

4.5 Perception of public response to the vaccine programme

During the interviews with the community liaisons, the perceptions of the public's response to the vaccine were discussed. While some reported positive responses to information and access to the vaccine, most reported on reasons why people had been slow or had not taken up the vaccine, these are summarised in the figure below.

Information	Fears	Culture	Employment	Practical
<ul style="list-style-type: none"> • Tursted sources • Missinformation • Broader messages • Hearing from health professionals 	<ul style="list-style-type: none"> • Impact on health • Phobias 	<ul style="list-style-type: none"> • Different messages from European countries • Trust of governments • Approaches to accessing health care • Personal choice 	<ul style="list-style-type: none"> • Potential loss of work • Lack of awarens of support grants • Challenge of time off work 	<ul style="list-style-type: none"> • Travel and access issues • Childcare issues • Digital literacy • Registration with GPs

Figure 4.1: Summary of community liaisons' perceptions of public responses

4.5.1 Information and Misinformation

The community liaisons identified that information was one of the key factors that had supported decisions about whether to take up the vaccine or not. Several factors perceived to influence decisions not to have the vaccine were the lack of information to address queries about the origin of the vaccine and potential side effects, and the circulation of mis information.

Social media was thought to be a contributor to the mis information, which shared messages aimed at driving fear and distrust of the virus. These included videos stating that the virus had directly led to people dying, microchips or questions over the ingredients of the vaccine, such as foetal remains, and potential long-term impacts on immunity. Other messages spread hatred for those who had been vaccinated, saying that people had been 'brainwashed' or were not in their right mind. While social media was considered to be a barrier to the vaccine uptake, it was although thought to be a 'good excuse' for people to decline the vaccine.

And, of course, it's not helped with all the misinformation about it gives you Aids or they inject a 5G microchip or all this sort of thing. And people who don't believe in a vaccine will find any excuse to prove their argument really.

I think the conspiracy theorists are at their all-time high, 'We told you that this would be never ending', and that being double vaccinated wouldn't be enough.

And when I was on that site there was a lot of I guess we could say abuse - swearing, abuse, almost laughing at me as though I - almost messaging around, 'You are insane, you are brainwashed', that kind of thing because I was encouraging the vaccine uptake.

A lack of information was also a reason suggested for lack of uptake, for example community liaisons reported that members of their community felt there was a lack of data to make a considered decision about whether it was safe to have the vaccine. There was also thought to be a lack of knowledge about where to get the vaccine, particularly outside of working hours. Questions were also raised by community members on whether there was a need to get the booster vaccine and whether this was needed especially as so many people were catching covid regardless of having had the vaccine. Hesitancy was also reported to stem from a lack of understanding of how the vaccine had been manufactured so quickly and of the technical language used when discussing the vaccine. Some reported that the government information was difficult to digest, conversely the mis information on social media was easy to understand, being shorter and better presented than the government messages. It was reported that some people did not trust the official messages but wanted to engage with factual information to help support their decision process.

So now you need to imagine a normal person in a warehouse environment, in a factory, when they are not using medical jargon, they are just simple people. To understand everything, what is being said, they don't understand that.

With so many people catching it I think that is the concern that we're felling, that people will think, 'Is there any point in this if everybody's catching it anyway?'

that's what they tell me anyway, 'There's not enough data to know whether this is safe for me'.

What also became clear from the community liaisons was that community members felt that there was a one-sided message about the vaccine - 'get the vaccine'. This meant that often their questions about the vaccine were not answered and that if they were hesitant, there was no room for a discussion to air their concerns. This left people feeling dismissed for making the decision to not get vaccinated.

so, there's a little bit of a sense that the Health Authorities believe there's one true answer and the answer is to get the vaccine. And that's a challenge because there's a sense that if you don't agree with that, there's not a way to have your voice heard.

A number of those taking part in the research also spoke about people having covid fatigue, they felt that they had been overloaded with information and were tired of the messages being shared.

people have got Covid information fatigue, that's what I would call it. They are literally overloaded, and they don't know which way they're turning.

4.5.2 Fears of the vaccine

Fear of the vaccine was also reported as a reason that had led to hesitancy amongst community members. Community liaisons reported concerns about leaving the house, fear of needles, and getting blot colts. Those who lived on their own, the elderly, and some faith communities were

reported to be particularly fearful of getting the vaccine and being sent home to manage potential side effects.

The reason for that is the varied communities, so we have some faith communities that are nothing short of terrified is probably a good description. They've got lots of fears around some of the messaging that's gone around.

4.5.3 Cultural factors

Cultural factors were identified as reasons why the vaccine had not been taken up. Community liaisons spoke about different messages coming from home countries, particularly mentioning the Eastern European countries, that influenced decisions in the UK. Early in the vaccine programme, there was little priority given to the vaccine from some countries and therefore those nationals living in the UK did not see the importance in getting vaccinated. There was perceived to be a shift in this attitude as home countries made it mandatory for people to have a vaccine if they wanted to return home, particularly at the time of the Omicron wave. Therefore, the policy and information shared by other countries played a part in shaping what people living in the UK thought about the vaccine.

speaking around the town it was very clear that 'people back home' is what I kept getting told, 'they are not getting the vaccine, why should I in England? It's no different'.

so, we have coaches that travel from Peterborough to take people home quite regularly, most weekends. So those coaches started to become empty because they couldn't go home because they didn't have the requirements to travel and now we've seen them filling them up. So, people must be getting vaccinated somewhere.

Furthermore, different cultural and historical norms were thought to have had an impact, for example lack of trust of governments and officials, different ways of engaging with medical services. This was also associated with a greater sense of autonomy now that people were living in the UK to make decisions and to have choice in their health care. Some community liaisons reported that people were exercising their right to choose whether or not to get vaccinated, rather than be told by the authorities what they should do. This lack of trust in the government was not limited to those from other countries but was also discussed in terms of the UK government breaches and scandals over parties etc. The community liaisons felt that this had led to a general air of mistrust that was impacting on vaccine take up.

Somebody said to me once that the problem is that - say, Latvia or Lithuania where they've been part of Russia before and have been dictated to, the minute you give somebody a little inch of freedom - which they'd get over here because they've got freedom of speech and freedom of choice - actually they use that. It empowers them; it's empowering to say no.

the stuff where Boris wasn't adhering to the Christmas party thing. When that came out it was really hard to convince people to actually listen to what we're saying because they were like, 'Well Boris doesn't listen to us so why should we listen to Boris?'

Other potential cultural challenges related to language barriers in understanding and accessing information and the potential for there to be peer pressure in some communities with people not wanting to share if they had been vaccinated when the overall sense in that group was to not get vaccinated. Finally, it was recognised that some individuals did not want to get vaccinated in the UK as the type of vaccine was not compatible with what their home country required and therefore, they were waiting to return home for a vaccine.

...they didn't want people knowing who's been vaccinated and who hasn't and there was a bit of, I would say, peer pressure on that front of, 'Oh, you are getting the vaccine'.

4.5.4 Employment concerns

The community liaisons reported that issues with staying at work was leading some members of their community not to take up the vaccine. There were concerns about not being able to go to work due to side effects, potentially resulting in a loss of employment, and losing time at work to attend appointments. It was also acknowledged that many workers were not aware of support grants available to pay for taking time off to isolate and that this was also a concern related to the vaccine. One community liaison also reported that they had been told by those in employment that they just wanted to carry on working and were not interested in the vaccine.

4.5.5 Practical factors

Several practical reasons were reported by the community liaisons that had impacted on vaccination rates. These related to challenges in accessing vaccine sites through lack of transport from rural areas or difficulties with childcare to take time to attend. Some community liaisons reported that people had experienced challenges with accessing bookings via the online system and raised queries about digital literacy and online access for all households when relying on this approach. This was discussed by one community liaison in relation to accessing the travel fund to book a taxi and how the system then asked lots of questions for an individual to prove they were eligible, potentially making this a stressful process to undergo. Certain groups were thought to find it particularly challenging to access vaccine sites, with people with a disability, single parents and those in deprived areas and supported housing being identified. Another issue was that not everyone is registered with a GP surgery, and may not have been aware of their ability to still get vaccinated. Finally, several community liaisons also acknowledged that any issue could be a barrier and some people may use this as an excuse, while for others who are experiencing a number of challenges in their life, the vaccine may have been one thing too many to be able to manage.

So, they can't get appointments, they don't know how to use the booking system or can't access the booking system; appointments aren't available at the right time, mixed messaging around bookings.

So, if our parents don't drive - and we know the booking sites have been wild at times, you come to book a vaccine and it gives you a site that's 20 miles away - it's not do-able. It's just not.

If it becomes difficult to understand, if it becomes difficult to see the point of, then they are like, 'I'm not going to engage in that, I'm going to carry on doing what I want to do because I do not get what's going on'.

4.6 Future recommendations and challenges

The community liaisons also discussed recommendations and potential challenges in the continued promotion of the vaccine programme. The recommendations focused on providing easy to understand, up to date information, in a range of languages and which addressed the concerns and fears that many people have about the vaccine. It was suggested that there should be a focus on showcasing how the vaccine works, for example how time off work has been lower for staff who are vaccinated or how customer confidence has increased. Situating the benefits in a way that is

relevant to those who are unsure was thought to be a positive approach, alongside messages that explain why the vaccine is safe and that the vaccine sites are well run. One community member emphasised that the messaging should be empathetic rather than technical, while others suggested that there needs to be more education about the vaccines, e.g. how they were developed. Suggestions were made to have a QR code link or website where people could access this range of information to support their decision making, while others stressed the need for strong local contacts and support from trusted community members to share the message about the vaccine.

It's just getting good information that's easily digestible rather than leaving the chance for you to make your own interpretations from it.

They need to hear that they are going to be safe; that they are not going to have reactions or if they did, what might happen.

So that's been quite a good sell, if you like, about keeping you employed and open and keeping your staff safe and well and then obviously your customers coming through the door.

Another recommendation was to identify ways to support people who have health issues or phobias, for example having greater provision at vaccine/booking sites where these issues can be catered for and personalised care provided.

There's nowhere on the booking system to log, to alert people that you are bringing somebody in with special needs.

Some of the community liaisons reported there could be greater engagement with businesses and employer to get their opinions on how best to engage with their staff. This was relation to industrial businesses with shift workers.

I think it's those bigger employers and the warehouses where they are on ridiculous shifts, they are working ridiculous hours, it's those ones that haven't found the time to go and do it. So maybe there's a bit of resource that's needed there.

Finally, it was suggested that the focus should be on engaging those who have had the 1st and 2nd dose to get their booster, and to focus on groups where uptake is low.

As well as making recommendations for future engagement, some community liaisons also acknowledged the potential challenges in this continued work. A number of those taking part in this research thought that it would be difficult to change people's minds at this stage, that their personal views and beliefs were now quite embedded.

I think changing people's perception, those that haven't had the vaccine, it's going to be very difficult now, even more so... I find it very difficult to tell those people that haven't been vaccinated to be vaccinated now or say that it's the right thing. I don't know, I don't know how we conquer that, it's a really difficult question to answer.

I feel as though we are in a situation where those who do not wish to take it are simply not going to be swayed by the fact that it's available to them close to their home or at the time of their convenience.

A final challenge related to the different way that organisations work and enabling a more flexible approach across the local authority to respond to community needs in a timely way, and in a way that engendered trust. As one community lead discussed, trust in communities can take time to build and they would like to see greater two-way relationships with community organisations.

it's going to leave communities and the public services with a little bit of hesitancy with each other. I think of the Local Authorities could actually give the trust first and then it will come back. That's the biggest disparity for me where things could improve.

5. Evidence from Community Members

In phase 3 of the project evidence from a range of community members was gained through an online survey, focus groups and interviews. Evidence is reported here in two main sections. The first reports data from the quantitative part of the survey. The second part reports qualitative data from both the open-ended survey questions and focus group and interviews.

5.1 Online survey: Descriptive data

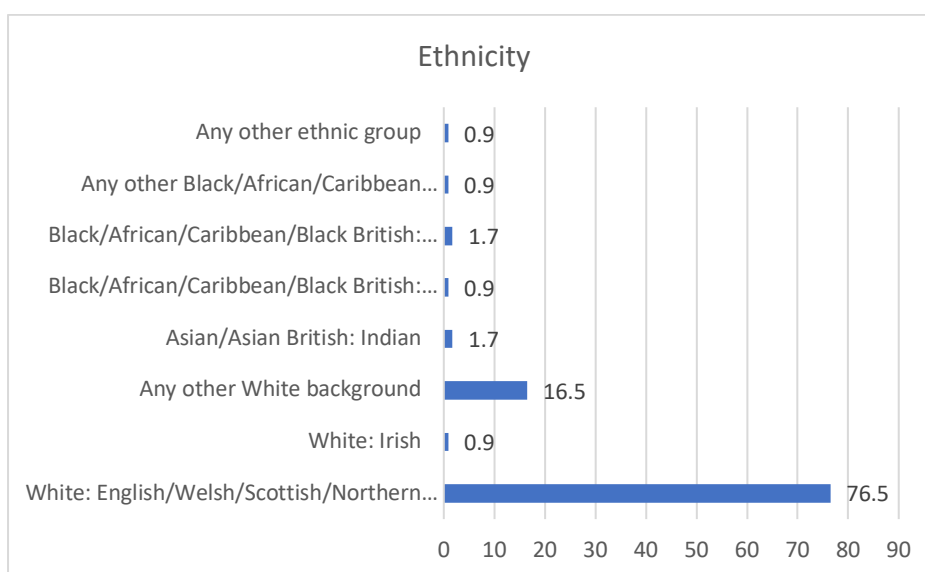
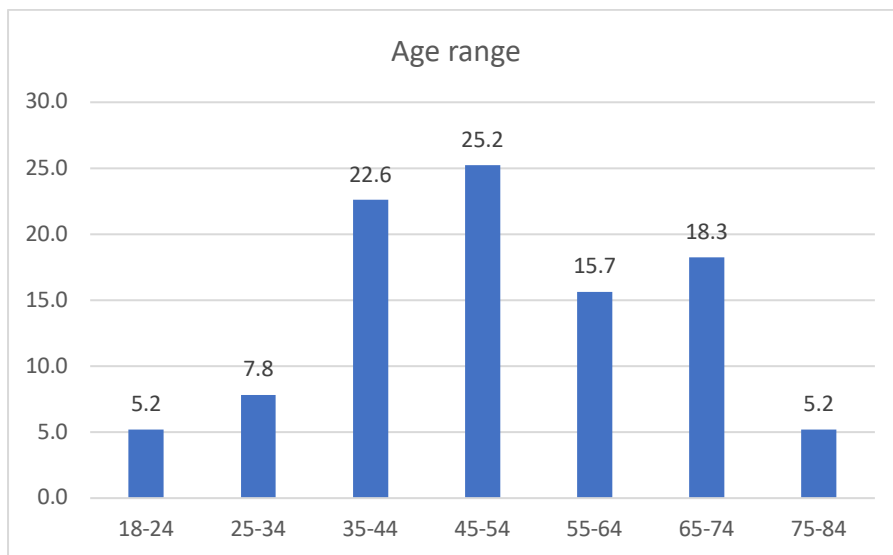
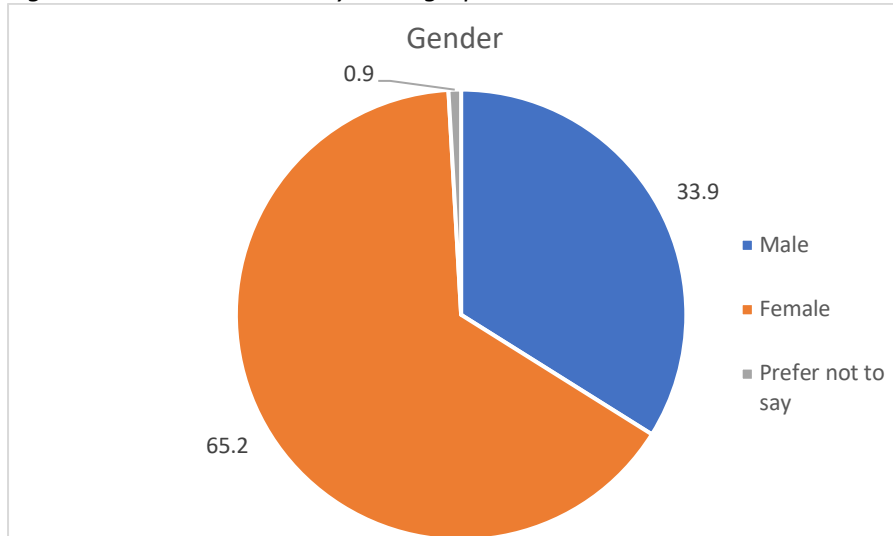
Of those responding to the online survey, 65% (n=75) were female and 34% (n=39) were males. This represents a higher proportion of female respondents than in the general population of Cambridgeshire and Peterborough, where there is a 50.1/49.4% male to female ratio respectively (Cambridgeshire Insight, 2020). Respondents were reported in each age bracket, with 25% (n=29) aged 45-54 and 23% (n=26) were aged 35-44. A higher proportion of participants were aged 18-64 years of age (71.4%) than is represented by the Cambridgeshire and Peterborough population, which has 61.7% aged 16-64 (Cambridgeshire Insight, 2020). Three quarters of respondents were White British (76.5%, n=88), with 16.5% (n=19) from a White other background, predominantly identified as from an Eastern European country such as Latvia or Lithuania. One person was Dutch, and one was Australian. Compared to the Cambridgeshire and Peterborough demographic profile for ethnicity, the survey participants have a slight over representation from the White Other category at 16.5% compared to 7.9% across the whole of Cambridgeshire and Peterborough, and slight under representation for White British, with 76.5% captured in the survey compared with 81.4% in the Cambridgeshire and Peterborough region (Cambridgeshire Insight, 2020). Some ethnic groups have not responded to the survey, for example those from the Chinese, Bangladeshi, Pakistani, Arab or mixed/multiple ethnic groups.

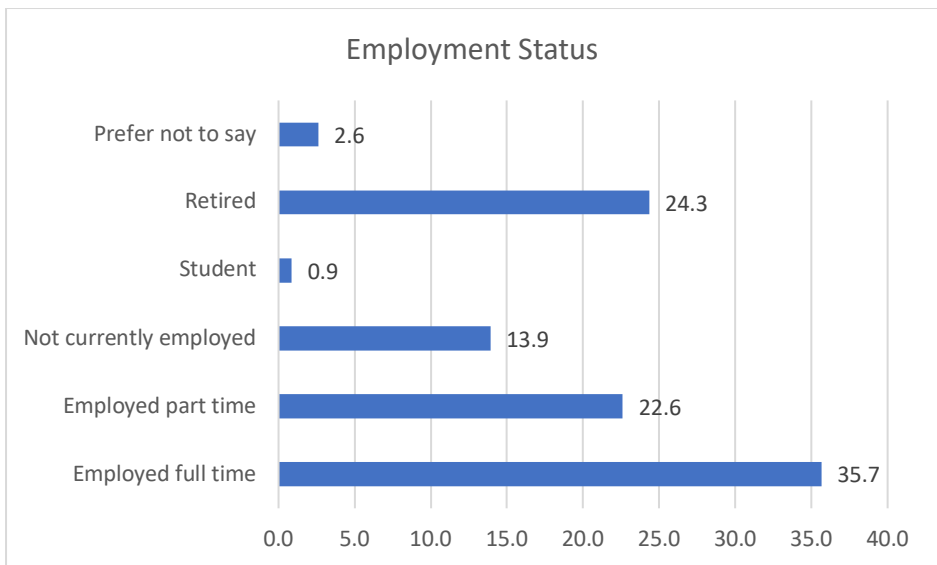
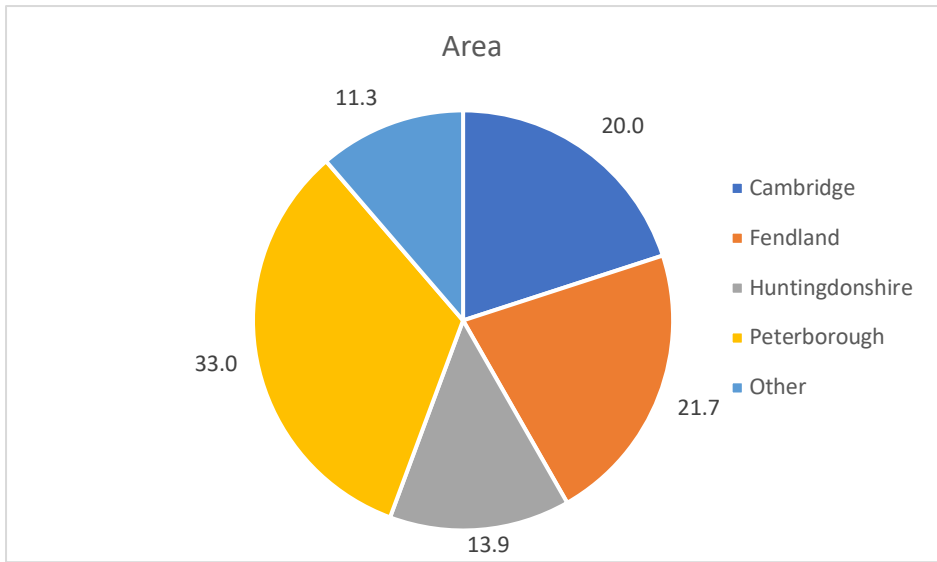
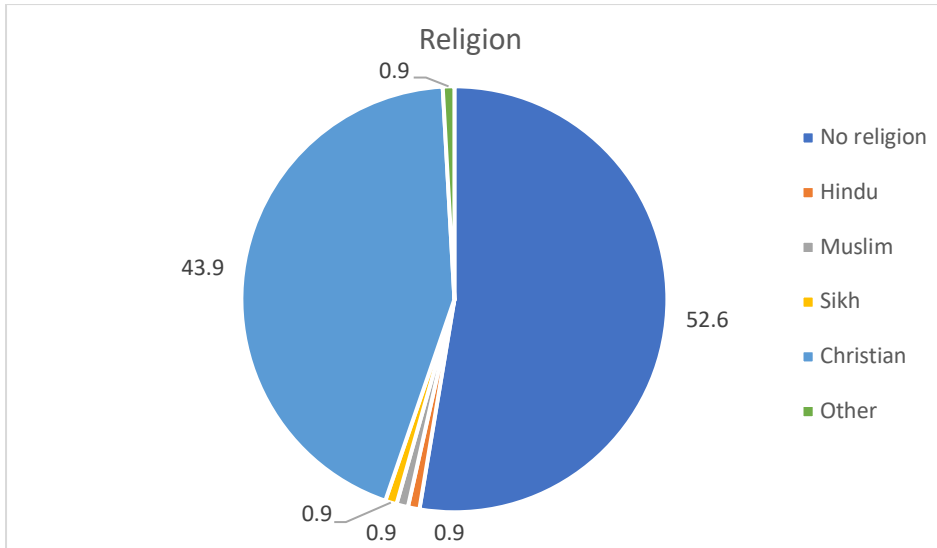
A third (33%, n=38) were from Peterborough, while 22% (n=25) were from Fenland, 20% (n=23) were from Cambridge City and 14% (n=16) were from Huntingdonshire. Other areas were identified as from East Cambridgeshire, South Cambridgeshire, Ely, and Cambourne, and seven respondents identified that they lived outside of Cambridgeshire and Peterborough; in Lincolnshire, Northamptonshire, Essex, Hampshire and Yorkshire. When asked to report on their religion, 53% (n=60) reported not to have any religion, and 44% (n=50) reported to be Christian.

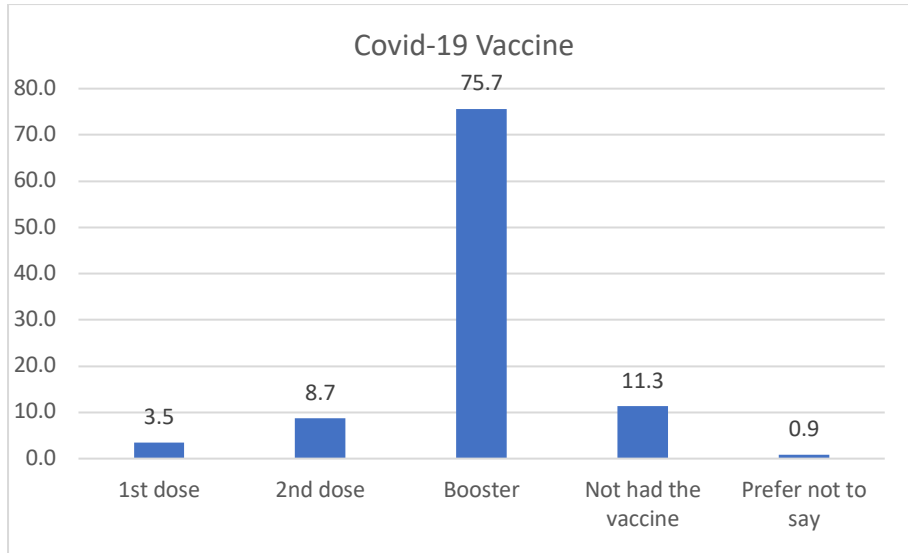
Of those responding, 36% (n=41) were employed full time, 23% (n=26) were employed part time, 14% (n=16) were not in current employment and 24% (n=28) were retired. When asked if they had a physical or mental health condition/illness, 56% (n=64) reported that they did not, 39% (n=44) stated that they did and 5% (n=6) preferred not to say. Of those responding, 82% (n=93) did not provide care or support for another person, while 18% (n=20) reported that they did. Three quarters of those responding (76%, n=87) had received a booster vaccination, 11% (n=13) had not received any vaccination, 9% (n=10) had received either a 2nd dose, and 4% (n=4) had received their 1st dose. See Figures 5.1-5.7 for full details (pages 32-34).



Figures 5.1-5.7 Online survey demographic charts:

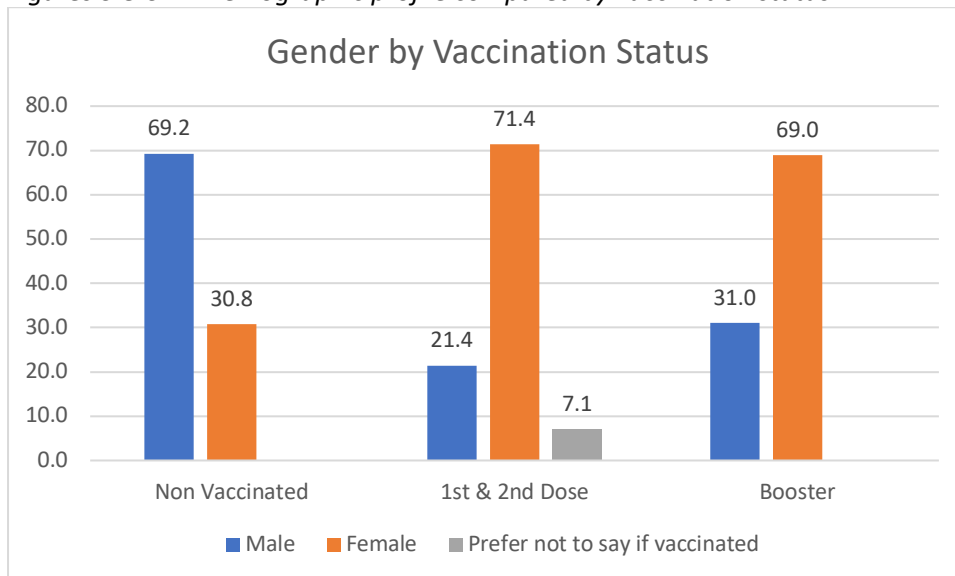


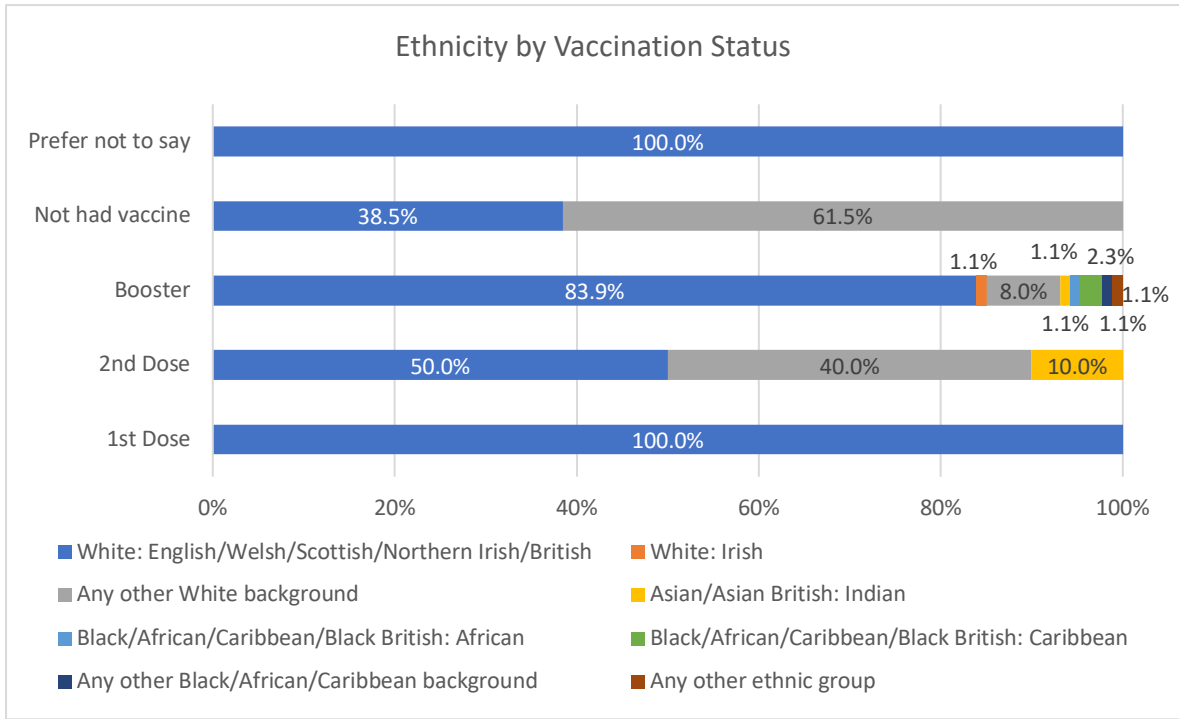
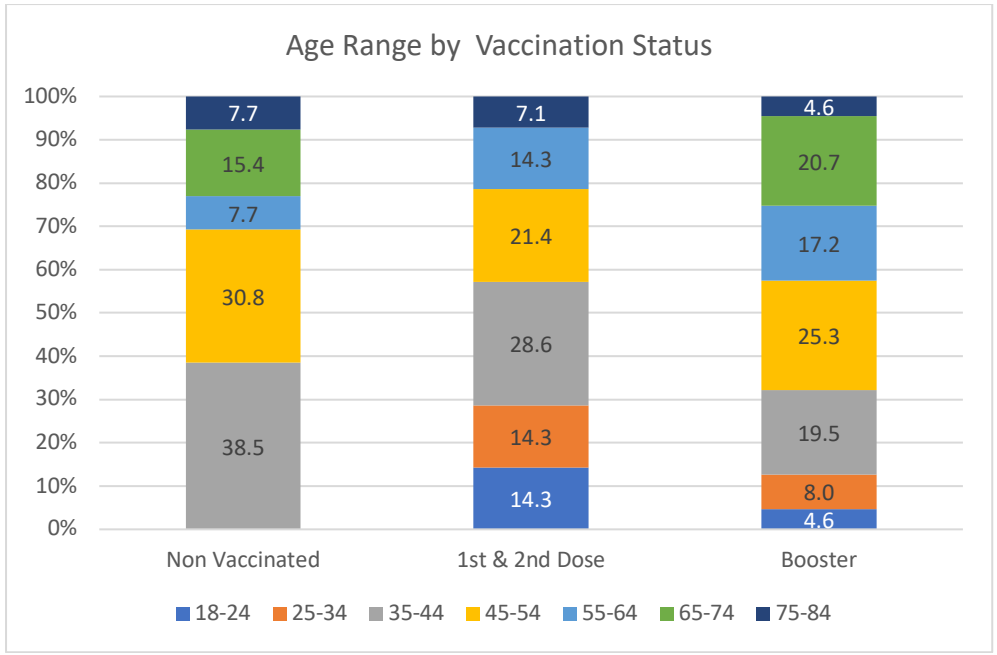


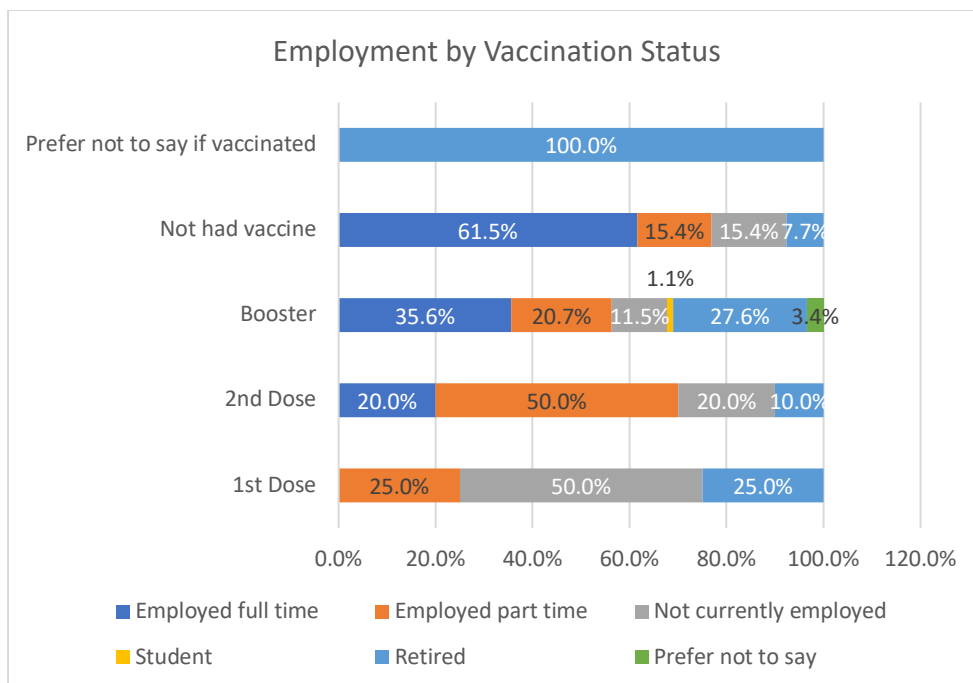
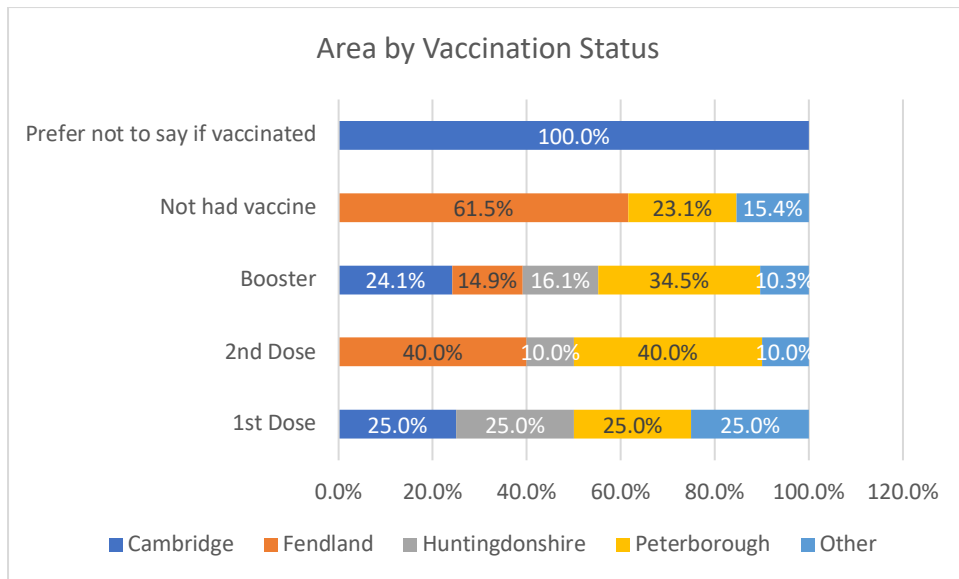


The profile of the respondents was also considered in relation to their vaccine status and details are shown in Figures 5.8-5.12. In terms of gender, the majority (69%, n=9) of those who had not been vaccinated were male, while 71% (n=10) who had received their 1st and 2nd dose and 69% (n=60) of those who had received their booster, where female. The highest proportion of those who had not been vaccinated were aged between 35-44 (39%, n=5) and 45-54 (31%, n=4). Those who had not been vaccinated were predominantly from a White other (62%, n=8) or a White British background (39%, n=5), and 62% (n=8) were from the Fenlands, 23% (n=3) from Peterborough and 15% (n=2) from another locality.

Figures 5.8-5.12 Demographic profile compared by vaccination status:







5.2 Views about the Covid-19 vaccine: survey, focus groups and interviews

Participants were asked what their views were about having a Covid-19 vaccine and what information sources they had accessed to support their decision making about the vaccine.

5.2.1 Non-vaccinated participants

Those who had not received a vaccination replied that they did not consider the vaccine to offer them any necessary protection, with one individual in the survey and three Lithuanian respondents reporting they had their own natural immunity. This view was reinforced by having been infected with Covid and having gained 'natural immunity'.

We are not scared of Covid. I have told my immune system to fight it. I do not use medications, my relationship with doctors are not great. Medics are not looking for the cause of the symptoms, they try to use pharmacy medicaments on me. I do believe that human immune system is perfect and can fight anything, if you do not interrupt. If you do not interrupt, your body is able to fight all viruses itself. (Eastern European/Lithuanian)

Concerns were also raised about the safety of taking the vaccine, particularly the need to take this multiple times. There was concern about the number of vaccines available and that the information provided about these was not sufficient to make a decision and presented a one-sided perspective, with further information wanted about risks and side effects. Personal choice and wanting to have a particular type of vaccine were also stated as reasons for not having had the vaccine.

Completely unnecessary for the majority and the propaganda machine driving a one sided narrative is shameful. It's broken all records for poor safety. But this data is ignored by the media and government. (White British)

I'm waiting for long term data. It is far too soon for me personally, the risk/reward ratio doesn't stack up. (White British)

I think vaccination is not protecting you from getting Covid. Don't think it's safe to jab myself many times. (Eastern European)

Some participants also suggested that the information was contradictory and that medical professional held different views about the safety and efficacy of the vaccine, adding further confusion to their ability to decision-making.

.... there is also split opinion between medics, some are supporting vaccination, some not. (Eastern European)

... doctors were saying that you have lighter Covid if you fully vaccinated, but I do not think it is true. (Eastern European)

In relation to the sources of information that had been accessed, those responding had watched the news (Sky and BBC), read newspapers (Telegraph and Guardian), had read independent medical articles or paper, magazines, talked to friends and family and been on the internet (NHS site) or social media.

Some respondents reported that this information was suspicious and the Covid agenda was being overly stressed. Others reported that there was not enough information about what was in the vaccine, or about the side effects, particularly the deaths resulting from having a vaccine. The lack of a balanced perspective and acknowledgement of different opinions was also noted, with one suggesting there should be space for a more open discussion about the vaccine. One individual from

the survey also commented that there was not enough information addressing the misinformation surrounding the vaccine, and mentioned the use of chips and chimpanzee DNA as examples.

Whilst I realise that adverse reactions are in the minority I think those stories should be made more readily available in the mainstream media. I know personally of two deaths linked to the vaccine and of three or four other serious bad reactions but never hear of similar stories unless via social media.
(White British)

I believe that the vaccines ingredients didn't have enough research. (Eastern European)

Pretending the questions aren't there doesn't help (White British)

Lithuanian participants in the focus group who were not vaccinated also raised issues related to personal freedom, freedom of choice, and feeling of exclusion from social life, travelling and workplace because of their choice. Some acknowledged that they will get vaccinated only if they need to travel. One decided to leave his workplace and become self-employed to avoid the need to isolate further.

The only reason I would of taken vaccination was for traveling, because I have a new born and my parents, grandparents have not seen their grandchild. I would only take the vaccine because it is more convenient to travel abroad. (Eastern European)

I am not for or against, if I will need to travel I will get the vaccine. (Eastern European)

5.2.2 Participants with 1st and 2nd Dose

Those who had received their 1st or 2nd dose raised some similar concerns about the Covid-19 vaccine. They also shared concerns that the vaccine did not protect against Covid and some had had Covid and felt they now had a natural immunity so were not planning to get another vaccination. Other respondents reported to have had poor or severe reactions and therefore were unsure whether to have another dose. While some expressed concerns about the testing phase of the vaccine and whether this had been sufficient, as well as the long-term impact of the vaccine on the body's immune system, especially when having multiple doses. Unclear messages about children and pregnant women receiving the vaccine were also a concern for some. Childcare and travel issues were identified as reasons why it had been a challenge to access the vaccination sites.

As with those who were not vaccinated, there was a similar sense that the misinformation had not been addressed. This tied in with the sense there was a lot of propaganda about the vaccine that had been about 'mass manipulation'. Some respondents reported concerns that the vaccine was a way for pharmaceutical companies to make money.

Others were more positive and reported that they would continue to get vaccinated when possible. Some individuals reported a social responsibility to get the vaccine, sharing concerns about not wanting to pass on the illness to others, particularly the elderly or more vulnerable in society or

seeing this as a necessity to care for family members. Some respondents talked about wanting to 'get back to normal' and that the vaccine was a way to achieve this.

I had my 2 doses of Pfizer vaccine, and as situation is unclear now if those 2 doses and booster would protect you from catching Omicron and future variants of Covid-19. I am not happy to get any more doses until there is confirmation future doses would give a proper protection. I get ill with Covid and gone through it as having a flu. So have some natural antibodies now too. (White British)

I wasn't sure whether I wanted to take the vaccine because I didn't mind going through symptoms of Covid in case I would get it. However, when I heard that people who have problematic health conditions and elderly would have worse symptoms, it changed my mind because I wouldn't want to pass on an illness to someone else and them have worse symptoms, or possibly put their life in danger. (Eastern European)

My view is that carefully tested, and trials that are conducted over a long period of time are more effective than quick fixes. I feel that the Covid vaccine was not sufficiently tested and the scare stories quickly gained momentum, driven by a social media in a negative way, because of the number of deaths. (Indian)

I am now not rushing into having the booster because I feel we will be asked to do it again in 2022 and am not willing to put my immune system through it multiple times as I do not think it is good for your body. (White British)

I believe the vaccines are dangerous and the propaganda campaign to have experimental vaccines wrong. (White British)

I was worried though of getting covid and being seriously ill or having to isolate for 10 days- who would look after the kids how would I get them to school. Hence having vaccine out weighed not having it. (White British)

Information about the vaccine was found by listening to the news (BBC), going on the internet (government and NHS websites), speaking with medical staff, such as their GP, newspapers, social media and having trust in health professionals such as Chris Whitty and Patrick Vallance. Being able to talk to GP was noted to be important especially in the case of those with existing medical conditions. Focus groups participants also stressed a sense of confusion with at times contradictory information coming from different public channels, such as government, newspapers and the government.

In relation to information that they would like to see about the vaccine, respondents wanted to see a more balanced perspective about the risks and benefits of the vaccine, its effectiveness and its long-term impacts. Those responding also wanted information about the testing process for the

vaccines to explore its rigour and the trial data. As part of this balanced view, respondents would like to see concerns and hesitations being addressed, for example to explain how the vaccine was made so quickly or to address myths from social media. Others reported they would like more information on where to get the vaccine and to have a choice of which type to receive. Clarity, plain language and consistency were seen as key features of effective communication. Some also reported that they were happy with the information to date.

A balanced media review which tells people of the risks. The scientists and government who have not allowed reporting of the vaccine injuries deaths and risks have blood and death on their hands. (White British)

I am aware of things on social media however I often feel it is not a credible source of information. The information can quickly become dissolved on social media making it difficult to separate fact from fiction. (Indian)

Better objection-handling. I don't think authorities did anything like enough to engage with particular hesitations e.g. the one I heard the most was that the vaccines were rushed and untested, and therefore dangerous. I've gone with trusting that mass manipulation of the population is something our public servants wouldn't stand for - but I haven't myself heard any plausible push-back on that theory that I could try to my sceptical friends with. (White British)

5.2.3 Participants with booster vaccination

Those respondents who had received the booster reported that they felt the vaccine was important and had decided to take the vaccine due to a 'sense of responsibility', and as a protection against illness, for themselves, family and friends and also for those in society who may be more vulnerable. The drive to protect the NHS and reduce hospital admissions was also a strong motivator for taking the vaccine.

Others reported that having the vaccine made their lives easier, particularly in terms of travel and work, and there was also a desire to return to 'normal' from some respondents. Taking the vaccine was perceived to be the best way for this to occur.

Other factors that determined decisions to take the vaccine was a trust placed in the scientists, in vaccinations, in Public Health England and the messages that they shared about the vaccine. Some respondents commented on the misinformation that had surrounded the vaccination, with some stating that they had not believed this and that it was born out of a lack of understanding about vaccinations. One survey respondent reported to have had a good community liaison regarding the vaccine who provided access to speak with a doctor and provided materials in their language to support decision making.

However, there were concerns about the potential long-term risks or side effects of having the vaccine, but some respondents reported that they thought the benefits outweighed the risks and it was a worthwhile thing to do. There were also respondents who had received the booster who now felt that the vaccine may not work as well as had been anticipated, and there were some who were 'hesitant' to receive further vaccinations. While others acknowledged that the vaccine may not

prevent them from catching Covid-19, but that it would (or had) reduce the extremes of the illness. One respondent felt that the vaccine had been a 'scam' and was now left with constant illness and regretted their decision, feeling it had had a severe impact on her life and ability to care for her child. This sentiment was echoed by another respondent who felt they had been 'bullied' into getting the vaccine.

Other comments made about the vaccine related to being thankful that it was free to take and that the programme had been 'well organised and effective'. Some reported that they felt it should have been mandatory, while others expressed caution about making it mandatory. There were also comments relating to a growing lack of trust in the government following the revelation of parties held during lockdown and social restrictions.

One participant reported they had experienced challenges in getting the vaccine for a vulnerable family member, they stated that this had taken time and effort but felt that it was worthwhile. Others reported challenges booking a vaccine and/or travelling to vaccine sites. One respondent was concerned that many NHS staff had decided not to be vaccinated, while another stated the vaccine programme had been about 'making money'.

Was more than happy to have the vaccine. It alleviated my fears of Covid in a huge way. I have had Covid in the family several times and it has protected us from severe disease.
(White British)

I support the roll out of the Covid 19 vaccination programme and in encouraging everyone to protect themselves and others by getting all their vaccines when they are eligible. (White British)

It was clear that the severity of symptoms of Covid outweighed the very small risk of adverse reaction attached to the vaccine.
(White British)

It is essential to help protect my health, the health of my family and the health of the population. (White British)

Worst made decision in my life, biggest scam by the government and if I had to do it again never in my life. Just because I am only 21 years old and now I am constantly ill I have a baby at home that needs taking care of and no one cares do they. I was never ill in my life until I got the vaccine now I am constantly on antibiotics steroid medicines and who is gonna take the blame and pay for my bills. (Any other White Background)

I trusted our scientists and medical professionals to produce a vaccine that was as safe as possible given the speed with which it needed to be available.
(White British)

There is a lot of mis-information around the vaccine which comes from a fear and lack of knowledge around how vaccines are developed and work. (Any Other White Background)

We were given good information and advice why we should take vaccination. Our community had good Covid coordinators who gave the most updated advice on Covid 19 & vaccination. The information came from NHS Doctor who is part of our Covid team. We also had information in our own language and videos to explain why we need to take vaccination. Most of our community have responded positively to taking vaccination. (Indian)

When asked where they had received information, those responding reported that this come from a range of sources. The key sources had been from the internet (Gov.com, NHS, Fullfact.org), from television news (BBC, Morning Live), newspapers and magazines (broadsheet, Financial Times, Telegraph, New Scientist, Economist), social media (Facebook and Twitter – some mentioned seeing feeds from immunologists, virologists and medical professionals), speaking with family and friends, accessing scientific journals or receiving information from their GP. Other sources included receiving local leaflets from Covid coordinators, government messages (particularly the Covid briefings), having messages shared through work, accessing the Covid Zoe app, and speaking with people from cancer community forums.

Some respondents also commented on the trustworthiness of the sources of information and while this had helped to influence decision making, some also reported to feel strongly about wanting the vaccine that while they accessed information, this had not influenced their decisions. However, others commented on the influence of the misinformation about the vaccine and that this may not have been properly addressed in the wider public messages.

The public information is a little limited. I feel that this may be a contributing factor to people seeking out information that is cherry picked and potentially false. (White British)

I don't think any of this influenced my decision about whether to have it or not as I understand the benefits for me and generally. (White British)

My employer also shared information on vaccines via email and staff intranet. (Any Other White Background)

Rightly or wrongly, I trust my government and its appointed experts to give me accurate information and advice upon which I act. (White British)

Felt this was trustworthy and clear; also listened to the experts on these shows [e.g. BBC] (White British)

News and social media. Very important and helped me make an informed decision. (White British)

The information that respondents would like to see shared about the vaccine related to addressing concerns about its effects and long-term use, with access to more detailed statistical information on transmission rates, hospital admissions etc made available. Respondents commented that they

wanted information that addressed issues relating to the combination of types of vaccine, on its effectiveness, the side effects (both long and short term), and how long the protection lasts for. Others also wanted more information on what the implications were of not having the vaccine, and eligibility criteria for having the vaccine. Information was also requested on the use of the vaccine for those who were clinically vulnerable/immuno-suppressed/pregnant and their effectiveness. More information on how and who developed the vaccine was suggested. Some asked for more information on when and where to get the vaccine. This greater level of detail on risks and an open discussion of the impact of the vaccine was considered as one way to overcome the concerns of those who had not been vaccinated.

The source of where the information came from was also important, and having 'trustworthy sources' was key, and it was suggested that health professionals were one of these trusted sources. Untrustworthy sources of information were considered to be via social media, and a reduced trust in politicians. How information is presented was also requested, so that this should be easy to read, and provided a balanced and truthful perspective, or as one respondent stated, to provide a more 'rounded view'. Information that addressed the 'scare mongering' of misinformation was also requested.

Other areas of information that were reported were: greater sharing of the progress of the roll out, how the UK is supporting third world countries with their vaccination programmes. A few respondents commented that they did not need any further information and one who suggested any information was unnecessary as this level of detail was not shared for other vaccines.

Statistically valid comparisons of rate of infection, likelihood of onward transmission, rate of hospital admission, severity of symptoms and death rate between vaccinated and unvaccinated people. Such a comparison must include identification of confounding factors and how these are taken into account. Confidence intervals must be presented for all data. (White British)

More in easy read. The side effect letter that GP gave me was not easy to read I didn't read it. (White British)

Professionals especially doctors who talk about the impact of vaccine for save lives. (Any Other Ethnic Group)

Would have liked more info about the side effects of the vaccine. Expected my arm to be sore and perhaps a little flu like symptoms, didn't expect to be completely overwhelmed with tiredness and exhaustion for several days. (White British)

More detail of the miniscule adverse events versus deaths and long term health effects of Covid. There seems to be an attitude of nil risk rather than any balanced assessment of the risks of everyday life. (White British)

Perhaps more on how it was developed as the fact it came about so quickly seems to be the stem of a lot of people's worry around it and this info may help those people decide to get the vaccine. (Any Other White Background)

True scale and figures of those that had adverse effect of the vaccine and how they recovered, if they did, if they did not what was their risk factor. (African)

A number of respondents also mentioned the influence of family and peer pressure. In such cases, the impact of the family or social group had a bearing on decision-making, but it also impacted on family cohesion when family members made the opposite decision in regard to vaccination. In regard to Eastern European and other migrant or foreign citizens, information and practices in their homeland also impacted on their decision whether to have the vaccine. In such cases, participants received and gained information from a variety of sources, many of which outside the official ones in the UK.

6. Discussion and conclusion

6.1 Key finding: complex, multifactorial interaction

The project explored vaccine hesitancy and confidence by gathering the views of actors and stakeholders across different levels of practice. The evidence confirms findings from international literature showing that vaccine hesitancy is a complex phenomenon which, as Dubé, et al, (2013: 1764) is the result of ‘the complex interaction of different social, cultural, political and personal factors in vaccine decision’. The evidence from the current study also aligns with WHO’s (2014: 7) Report of the SAGE Working Group on Vaccine Hesitancy which stresses the fact that ‘Vaccine hesitancy is complex and context specific, varying across time, place and vaccines. It is influenced by factors such as complacency, convenience and confidence’. Evidence from community members in particular show that ‘Vaccine attitudes can be seen on a continuum, ranging from total acceptance to complete refusal. Vaccine-hesitant individuals are a heterogeneous group in the middle of this continuum. Vaccine hesitant individuals may refuse some vaccines, but agree to others; delay vaccines or accept vaccines but are unsure in doing so’ (WHO, 2014: 8).

The current study also shows that while diverse groups of people have specific needs, their attitudes towards vaccination are not necessarily determined by the group they belong to. The implications for effective vaccine uptake is to acknowledge what is common to all, specific to some, and relevant to individuals. The study shows that there is evidence of community liaisons, local authorities’ and NHS staff having used a multi-dimensional and flexible approach while being forced to adapt to fast changing situations on the ground.

A further insight of the study is that while the initial focus was on hesitancy and then confidence, the opportunity to hear from both vaccinated and unvaccinated members of the community shows that even vaccinated individuals are no less sceptical, wary and confused about the information they received about the pandemic and the vaccine itself. The implication for future practice is that it is advisable to reach all members of the community especially given that a number of vaccinated participants share their doubts about receiving a further vaccine or booster.

A number of models have been put forward to explain vaccine hesitancy, confidence and the interaction between individual attitudes and other environmental factors (Fig. 6.1). However, a key finding of the project is that the distinction in attitudes, opinions between vaccine hesitant and/or refusal and vaccine acceptance are less stark than previously expected, although their behaviour and ultimately decision are different. Rather, as WHO (2014) suggests, vaccine hesitancy and acceptance are better understood to be on a continuum. In this respect, the current project found that irrespective of vaccination status, community members shared similar issues and concerns about the vaccine and similar queries about the quality, quantity and content of the communication and information they received.



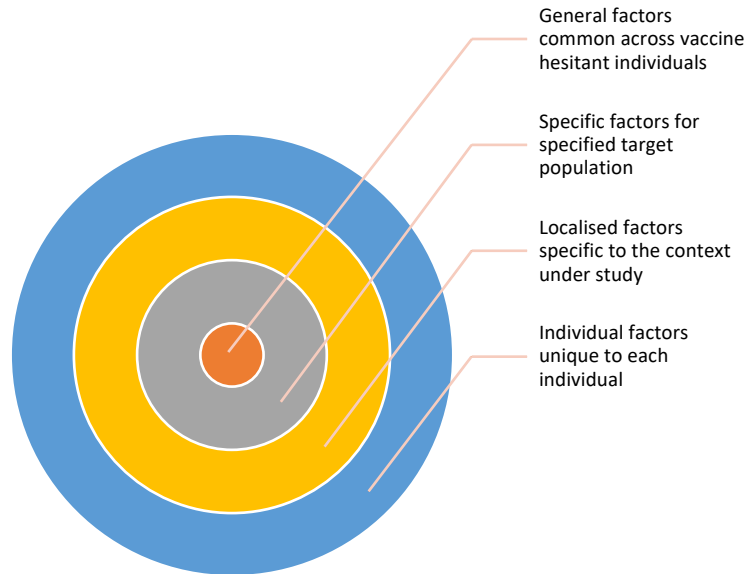


Figure 6.1 - Interplay of dimensions explaining concurrent factors for vaccine hesitancy

Drawing from the WHO (2014: 11-12) *Report of the SAGE Working Group on Vaccine Hesitancy*, our conceptual model will make use of the Complacency, Convenience and Confidence or '3Cs' model as explained below:

- **Confidence** – 'trust in 1) the effectiveness and safety of vaccines; 2) the system that delivers them, including the reliability and competence of the health services and health professionals and 3) the motivations of the policy-makers who decide on the needed vaccines
- **Complacency** – 'where perceived risks of vaccine-preventable diseases are low and vaccination is not deemed a necessary preventive action', and
- **Convenience** – 'measured by the extent to which physical availability, affordability and willingness-to-pay, geographical accessibility, ability to understand (language and health literacy) and appeal of immunization services affect uptake'.

The development of protocol for interviews and focus groups drew from WHO SAGE Working Group vaccine determinants matrix (WHO, 2014: 12) which identifies 3 key areas, as follows:

- **Contextual influences** - Influences arising due to historic, socio-cultural, environmental, health system/institutional, economic or political factors (e.g., communication and social media influences, religion, gender, policies, etc)
- **Individual and group influences** – personal and social/peer environment influences
- **Vaccine/vaccination specific issues**

6.2 Evidence in practice

This section makes use of the models outlined in the previous section to provide a more focused account of the evidence collected through the engagement with participants at different level of operation, support for vaccination, and members of the community.

Confidence

This refers mainly to trust. More in detail:

- a) In regard to the effectiveness and safety of vaccines, unvaccinated participants were the most sceptical although even vaccinated members of the community would have liked more information about how the vaccines were developed, their long-term safety and side effects.
- b) Community members who were vaccinated trusted the system that delivers them, including the reliability and competence of the health services and health professionals. The NHS in particular was cited as a trusted source of information, and GPs were seen as essential providers of trusted information which meet individual needs.
- c) Community members had a more nuanced approach to the motivations of the policy-makers who decide on the needed vaccines. Generally, community members showed a degree of scepticism in policy decisions, while acknowledging that the measures put in place to prevent Covid-19 spread were needed. In regard to the vaccine, vaccinated community members felt that the messaging from government was at times contradictory or unclear. The literature on vaccine hesitancy argues that low trust in government and policymakers can be one of the reasons for low vaccine uptake. A number of community liaisons and eastern European community members raised this issue. Evidence from this study shows that community members who are not UK nationals, actually receive information from at least two governmental sources which can give different or contrasting messages particularly in regard to measure to halt the spread of Covid-19.

Complacency

- Risk and risk-taking were important considerations for both vaccinated and unvaccinated members of the community. However, whereas unvaccinated members of the community were willing to take the risk of becoming infected, vaccinated participants were more risk-averse and saw the vaccine as a way to prevent infection, or becoming seriously ill with Covid. Yet, these two diametrically opposite positions hide much complexity and a continuum of reasons for taking up the vaccine or otherwise. While unvaccinated people justified their choice on the grounds of either not knowing enough about the safety of the vaccine, for example, or relying on their immunity system, vaccinated participants talked about taking a 'calculated risk' trusting the vaccine and science. A further important difference between the two groups of participants was that vaccinated participants saw the vaccine as a way to minimize the risk of spreading the virus to vulnerable people and therefore being vaccinated was perceived as an act of civic responsibility.

Convenience

- This includes a range of aspects such as accessibility to vaccination centres, availability of the vaccine, but also how information was communicated both the means of communication and the language used. In this regard it is important to note that during the life of the project a number of vaccination programmes took place. These included the objective of providing 1st and 2nd doses, together with coping with the Omicron variant in the Autumn and the Booster programme over Christmas. As outlined by community liaisons and other participants on the frontline, a diverse range of programmes and engagement activities took place on an ongoing basis across the region. Weekly communication between community liaisons and frontline council and NHS workers ensured that all were kept up to date with policy changes and opportunities. Likewise, these were opportunities to tackle issues before they became problems. While overall this approach ensured that vaccination centres were made accessible, in many cases through mobile vaccination units and first-hand engagement with employers, some participants still faced issues, such as travel, incomplete or competing information, or lack of clear information specific to how to book a vaccine and how to access it. It is important to note in regard to the physical accessibility to vaccination centres that the geography of the region in this study is varied. It includes large urban places like

Cambridge City and Peterborough, to rural areas such as the Fenland, East and South Cambridgeshire. In addition, the economy of the region is mixed and complex. This includes three main universities with a highly mobile student population, to agriculture employing migrant and seasonal workers, and a number of other major employers mainly as distribution centres. Rural areas in particular suffer from lack of reliable public transport network.

Contextual influences

- This aspect includes historic, socio-cultural, environmental, health system/institutional, economic or political factors. Some of the issues related to this aspect have been mentioned above in regard to the geographical and economic outlook of the region. However, one important aspect which had an influence and was central to the project was the high levels of immigration and the diversity of immigrants. While this aspect would benefit from more research, immigrants to the region comprise international students, academics and researchers, to migrant and seasonal workers, to settled migrants, and UK settled migrants who are highly mobile within the region and across neighbouring regions. Such diversity brought challenges in reaching the target population. Amidst the challenges, communication was a main one. In this case, the work of community liaisons was key in breaking down the linguistic barrier, but also in breaking through social and cultural barriers providing liaising and brokering across different actors within a complex and ever-changing vaccine response. Another challenge highlighted by Eastern European participants in the interviews and focus group was the fact that this population got their information about Covid-19 and the vaccine from both sources (official or through social media) from both the UK and their own country. It is likely that in some cases where English language proficiency was not high, migrant population received their information mainly or solely from media outside the UK.

Individual and group influences

- There is evidence, either anecdotal through day-to-day community liaisons and NHS and council professionals, and through the survey, interviews and focus groups of both personal and social/peer environment influences. These have to be viewed as impacting both negatively or positively on the decisions to take up the vaccine. Evidence shows that personal attitudes and views are not generally fixed and therefore ongoing engagement is key. There is indirect evidence that family members are important influencers. Likewise, peer groups or specific working context can impact on the ability of the individual to make decisions, like taking up the vaccine, which would be contrary to the group/community's views and attitudes. One of the key findings of the study however is that both vaccinated and unvaccinated participants share similar views in regard to trusting official sources of information, particular those from policy makers. Both EU and UK nationals also shared doubts about the truthfulness of some of the communication and decision-making by the UK government. Views were more positive about the NHS as a trusted source of information. Both groups of nationals and both vaccinated and unvaccinated cited unclear, contradicting, and conflicting information as a reason for their decision about the safety of the vaccine.

Vaccine/vaccination specific issues

- Related to the last point above, there was a consensus of community members about treating them with respect and feeling 'pressurised' to behave in a certain way. For those who had opted out of the vaccination, issues of exclusion were also raised, thus isolating them further from engaging. However, there were also cases when the 'pressure' to get vaccinated to, for example, traveling was enough to change some participants' minds. The

implications are to treat all as rational decision-makers and to enable two-way conversations to take place about the vaccine.

6.3 Recommendations for an inclusive approach

This project started with a narrow focus on a targeted population, that is Eastern European and over 50s members of the community's views, attitudes and behaviours about the vaccine. It was carried out during a hectic and challenging time made more so by the Omicron variant in the Autumn 2022 and the resulting Booster programme. In effect, the project moved from a narrow focus to encompassing a variety of views of diverse stakeholders and actors to accommodate for changes in vaccine uptake in the population, and changes to policies, interventions and practices. This flexible and collaborative approach has had the benefit of gaining a richly articulated view of how public bodies, such as the NHS, environmental officers, district and local councils members, and community liaisons responded to the ever-changing challenges on the ground, together with an account of how members of the community experienced the Covid pandemic and the various vaccination programmes. From a research perspective, this project is unique in providing a different way of gaining insights in the issue of vaccine hesitancy. In collecting evidence over six-months the project adds a more in-depth understanding of the many factors influencing vaccine uptake which traditional methods of data collection, such as surveys, within a short period of time cannot achieve. As a result, evidence from the project substantiates, complements but also challenges traditional ways to understand vaccine hesitancy, particularly in regard to migrant populations, and other hard to reach groups.

This final section of the report focuses on recommendations for practice. In doing so, it suggests that Dubé, et al.'s (2013: 1764) model represented below provides an overall visual representation of the evidence collected and ways to tackle future challenges, possibly a vaccination effort in the autumn.

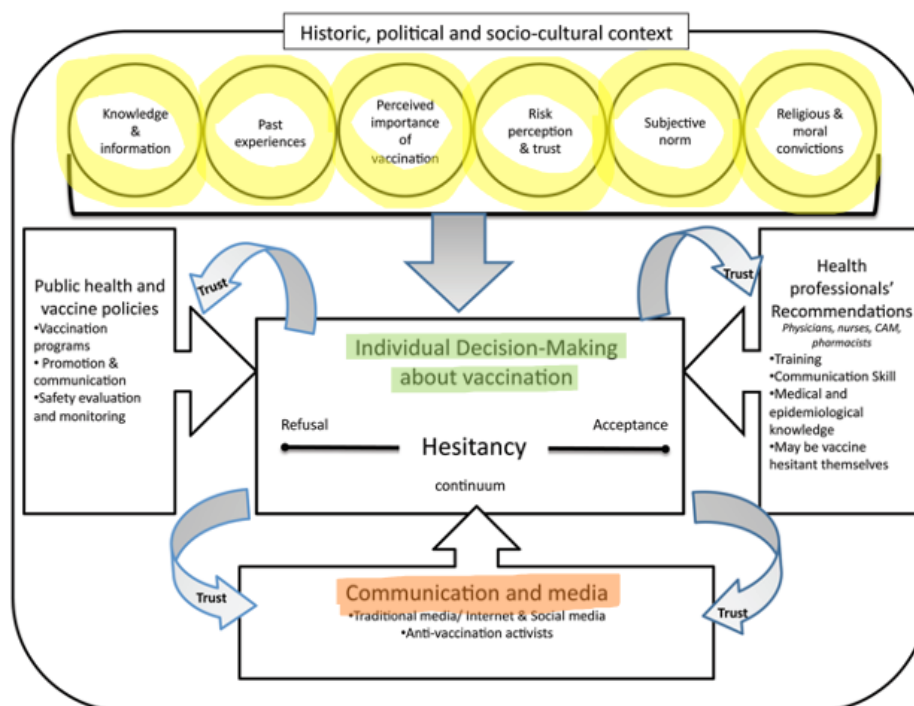


Figure 6.2 - Conceptual model of vaccine hesitancy (Dubé, et al., 2013: 1764) [adapted]

While the model offers a comprehensive overview of a number of integrated aspects and factors which can impact on views of and behaviours about the vaccine, the current project provides insights only in the highlighted areas. The focus of the project was on identifying ‘individual decision making about vaccination’. In doing this the project focused and uncovered evidence related to community liaisons’ and community members’ historical, political and socio-cultural context including also physical and geographical aspects specific to the region which acted as possible barriers. Evidence from the project also highlighted the importance of effective communication and trust, possibly the two most important aspects in persuading community members’ about the benefits of vaccination.

Our recommendations address two aspects of inclusion, here understood as breaking down barriers to *access* and *participation*. In doing this we recognise the existence of individual and group specific needs and barriers. However, evidence from the project has also shown that there are general needs which go beyond pre-established views about specific individuals and groups.

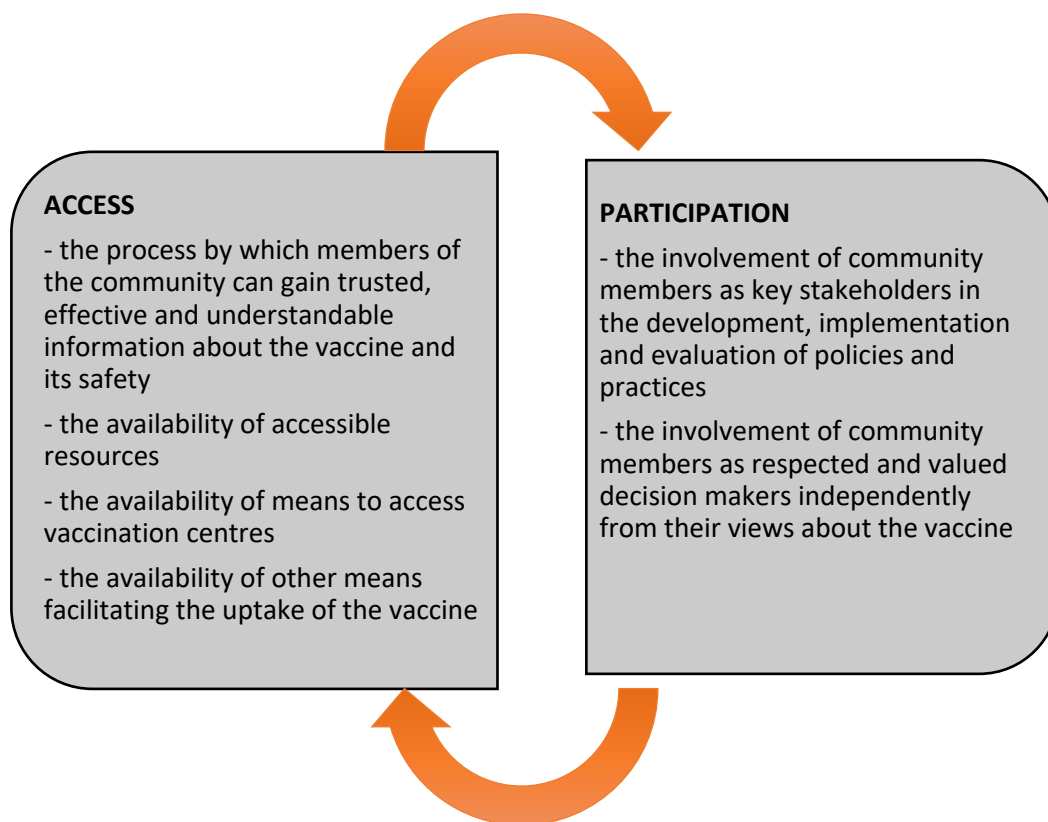


Figure 6.3 – Outline of key aspects of inclusion: access and participation

6.3.1 Recommendations to improve access

Evidence about barriers to access are evident in the account of community liaisons and community members, regardless of the latter’s vaccination status. Access here refers to remove barriers to physical and knowledge-based sources. In this regard vaccine hesitancy can be the result of compounded barriers referring to both the inaccessibility of information, or the inability to make sense of the information provided, and the inaccessibility of, for example, vaccination centres either because of physical or family barriers, or due to employment regulations.

With regard to physical accessibility, there is evidence of an array of means to bring vaccination to communities and individuals. Likewise, there was evidence of ongoing engagement with employers although this is fraught with a number of challenges.

Communication in its broadest sense was by far the most cited reasons for taking up or refusing the vaccine. While this aspect would merit more in-depth research, some of the key barriers referred to complex, at times contradictory and confusing information whether about the vaccine and its safety, or about how to book a vaccine and where to go to be vaccinated. This situation created a space for alternative sources to fill in the gap and, for better or for worse, impact on the members of the community decision making. In regard to communication, it is recommended that communication teams continue with their best practice work of using different formats/approaches, working through local organisations and trusted individuals and providing materials in different languages. The report also acknowledges the challenges in responding locally with nationally agreed communication strategies. Consideration could be given to priorities that enable face to face engagement, messaging from health professionals, or coproduced communications through collaborations with local communities. The emphasis could be placed on encouraging a two-way communication to enable different sides of the vaccine debate to be considered. Further recommendations relate to the timely address of misinformation and fears of the vaccine (e.g. how the vaccine was developed in the time frame, impact on immune system, value of having a booster with so many still getting Covid) and showcasing the positive impacts of the vaccine (e.g. how time off for staff is lower, customer confidence increased) can highlight benefits that will resonate with businesses and individuals.

There is evidence, on the other hand, that the groundwork done by community liaisons, health professionals and council staff also contributed positively to filling the gap left open by official communication. In this case, community liaisons acted as brokers between top-down generic policies and practices and the needs of specific communities and individuals on the ground.

Evidence from the project shows that access to effective and impactful communication was a key priority for council and health professionals although at times the fast-changing nature of top-down directives created challenges in the flow of effective and reliable information.

It is recommended that the extensive work already carried out and the knowledge and expertise developed in regard to effective means and channels of communication continues and is developed further as a way to cope with a possible Autumn vaccination initiative, but also in regard to other future and ongoing health initiatives.

6.3.2 Recommendations to improve participation

A second but no less important aspect of inclusion and, consequently, viable for improving behavioural change and the increased uptake in vaccination rates is that of fostering participation. Evidence from interviews, focus groups and qualitative survey questions show that both vaccinated and unvaccinated members of the community refers to the values of 'freedom of choice' and 'respect of personal decision making'. While a number of them opted for the vaccination as a sense of responsibility for themselves and others, others cited being pressurised and excluded for their views.

It is recommended to foster two closely related aspects of participations, that is,

- **the involvement of community members as key stakeholders in the development, implementation and evaluation of policies and practices**

- **the involvement of community members as respected and valued decision makers independently from their views about the vaccine**

6.4 Concluding remarks

This project started with a narrow remit focusing on the views on the Covid-19 vaccination of specific targeted populations in Cambridge City, Peterborough City and Fenland. As the project was underway, changes to the Covid-19 infections and related vaccination initiatives steered the project towards a more geographically and population-wide focus. It also highlighted the role of community liaisons and health professionals in the efforts to increase vaccination rates. As a result, the project offers a snapshot of the attitudes, views and experiences of a wide range of stakeholders during a 6 months period.

The project is, in relation to published research in health-related journals, innovative for having applied a range of methods of data collection, but most importantly for having included the views of those operating within what we called the 'vaccine ecology'. Its evidence supports previous work regarding the factors which influence vaccine hesitancy and confidence. However, it also contributes new knowledge specifically about the need to treat members of the community as individual decision makers whose belonging to specific groups, be them age, gender or ethnic background, is only one factors in defining their attitudes and behaviours.

The project has its limitations. It did not manage to gain the views of more members of the community belonging to specific groups as planned, or to focus primarily on the three locations outlined in the original proposal. No doubt, further research would be able to uncover more specific issues, more diverse views, and possibly more unique needs and barriers.

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Appendices

Community Members Focus Group Information Sheet



Exploring views of the Covid-19 Vaccine

What's it all about?

Hello, we are Cristina and Alison from the University of Northampton.

We are doing a project about the Covid-19 vaccine. This project has been commissioned by Cambridgeshire and Peterborough Clinical Commissioning Group, in association with Cambridgeshire County Council and Peterborough City Council.



Cristina

Ali

We would like to hear your thoughts about the vaccine. |

What will I be asked to do if I help with the project?

We would like to invite you to take part in a focus group. This will take about 1 hour. We will ask about your views of the vaccine and what information you have heard about the vaccine.

We will record what is said during the focus group. This will help us to review what we have talked about. The recording will not be made public. The recording will be written out fully into a transcript. We will then delete the recording. Some comments you make may be included in a report. Your name will not be used.

If you do not want to take part, that is ok. You will not have to give a reason. If you do stop taking part, we may still include information you have given. It is not possible to identify individual responses from the group discussion.

Who will know that I am taking part?

Only the researcher and those in the group will know that you are taking part. Your name will not be linked to what you tell us. Any personal information you tell us will be taken out of the written transcript. Your personal details will not be made public.

Do I have to take part?

No. It is up to you if you take part. If you decide you do not want to take part, that is ok.

What will we do with what you have said?

We will write a report to summarise what we have learned through this study. This will be shared with the county and district councils in Cambridgeshire and the Clinical Commissioning Group. We also aim to share this with those we have spoken to through local organisations and groups. The information will help [future plans](#) and ways to share information about the vaccine and future health activity.

Where can I find more information about the project?

Please contact Cristina or Alison to find out more about the project

Got a question?

You can phone, email or text us:

Cristina Devecchi at Cristina.Devecchi@northampton.ac.uk

Or

Alison Ward on **07740 716551** or email: Alison.ward@northampton.ac.uk

Community Members Focus Group Questions

Can you tell me about your experience of the covid vaccine?

Can you tell me about the information you have heard or seen about the covid-19 vaccine?

Type of information (medium e.g. leaflets/adverts)

What was the message (negative or positive)

Where did you hear/see this

What did you think about this information?

What worked, did not work?

How has this shaped your views about the vaccine? (e.g. safety of use, competence of health service/professionals)

If you hear something you do not understand where do you go for information?

Who do you trust the most for information? And why

Who do you trust the least for information? And why

What information would you have liked to hear/see about the vaccine?

Is there anything that would encourage you or discourage you from getting a vaccine?

Perceived risks?

Availability of vaccine?

Language/cultural aspects?

What was a key factor in deciding whether or not to get the vaccine?

What else could have been done to support you to get the vaccine?

(e.g. transport, more sites, etc)

What could be done in the future to support the sharing of information about or access to vaccines or other health activities?

Is there anything else you would like to add?

Community Members Online Survey Information Sheet



Exploring views of the Covid-19 Vaccine

What's it all about?

Hello, we are Cristina and Alison from the University of Northampton.

We are doing a project about the Covid-19 vaccine. This project has been commissioned by Cambridgeshire and Peterborough Clinical Commissioning Group, in association with Cambridgeshire County Council and Peterborough City Council.



Cristina

Ali

We would like to hear your thoughts about the vaccine.

What will I be asked to do if I help with the project?

Below is a link to a short survey which you can open through the QR code or link. This survey will take about 10 mins to complete. We will ask 3 questions about your views of the vaccine and what information you have heard about the vaccine.

You will not have to give your name, but we will ask you some questions about your age, gender and ethnicity so that we can see the range of people who have taken part.

You do not have to take part and can change your mind before you press submit. Due to the nature of the survey we will not be able to identify you once you submit so we will not be able to remove your responses.

Who will know that I am taking part?

No one will be told that you are taking part. At the end of the survey there is an option to take part in the next stage of our project. If you want to take part we will ask you to leave your name and a way to contact you. This information will be kept separate from your survey answers.

Do I have to take part?

No. It is up to you if you take part. If you decide you do not want to take part, that is ok.

What will we do with what you have said?

We will write a report to summarise what we have learned through this study. This will be shared with the county and district councils in Cambridgeshire and the Clinical Commissioning Group. We also aim to share this with those we have spoken to through local organisations and groups.

Where can I find more information about the project?

There is more information available about the project when you click on the link or QR code below.

Got a question?

You can phone, email or text us:

Cristina Devecchi at Cristina.Devecchi@northampton.ac.uk
Or
Alison Ward on **07740 716551** or email: Alison.ward@northampton.ac.uk



Exploring views of the Covid-19 Vaccine

To access the survey:

Link: <https://northampton.onlinesurveys.ac.uk/covidvaccine>

QR code:



Community Members Online Survey Questions

We would like to get your views and experiences on the Covid-19 vaccine, what messages you have heard or seen about the vaccine and what information would be helpful to you in supporting decisions about whether to take the vaccine.

What are your views about having a Covid-19 vaccine?

Where have you read or heard information about the Covid-19 vaccine? And how useful was this information in supporting your decision?

What information would you have liked to hear/see about the vaccine?

Please can you complete the following details about yourself:

What gender do you identify as?

Male Female Prefer to self-describe: _____ Prefer not to answer

What is your age?

18-24 25-34 35-44 45-54
 55-64 65-74 75-84 85 and over

Please specify your ethnicity. Choose one option which best describes your ethnic group or background:

White

English/Welsh/Scottish/Northern Irish/British Irish
 Gypsy or Irish Traveller Any other White background, please describe: _____

Mixed/Multiple ethnic groups

White and Black Caribbean White and Black African White and Asian
 Any other Mixed/Multiple ethnic background, please describe: _____

Asian/Asian British

Indian Pakistani Bangladeshi
 Chinese Any other Asian background, please describe: _____

Black/African/Caribbean/Black British

African Caribbean
 Any other Black/African/Caribbean background, please describe: _____

Other Ethnic Group

Arab Any other ethnic group, please describe: _____

Which area do you live in?

Cambridge Fenland Huntingdonshire Peterborough

What is your current employment status?

Employed full time Employed part time Not currently employed
 Student Retired Prefer not to say

Do you have any physical or mental health conditions or illnesses?

Yes No Prefer not to say

Do you look after, or give help or support to, anyone because they have long-term physical or mental health conditions or illnesses, or problems related to old age?

Yes No Prefer not to say

What is your religion?

No religion Buddhist Hindu

Jewish Muslim Sikh

Christian Any other religion _____

Have you had the Covid19 vaccine?

1st dose 2nd dose Booster Not had the vaccine Prefer not to say

We would like to speak with people about their experiences as part of an online focus group. Would you like to receive information about this next stage in our research?

Yes

No

If yes, please leave your name and email or telephone number so we can get in touch with you.

NAME:

EMAIL:

TEL NO:

Please note that these details will not be linked back to your answers and will be kept separate.

Thank you for sharing your views.

Focus Group Information Sheet

Study title

Understanding views on the Covid-19 vaccines

Why have I been invited?

You are being invited to take part in a consultation to explore the hesitancy in covid-19 vaccine take up in particular groups in Peterborough and Cambridgeshire. Before you decide whether you wish to participate, it is important for you to understand why the consultation is being conducted and what it will involve. Please take some time to read the information provided and discuss it with others if you wish. Please ask if there is anything that is not clear, or if you would like more information.

What is the purpose of the study?

The University of Northampton have been commissioned by Cambridgeshire and Peterborough Clinical Commissioning Group, in association with Cambridgeshire County Council and Peterborough City Council, to explore reasons for vaccine hesitancy and ways of engaging with populations who are not currently accessing the vaccine. We would like to speak with stakeholders and community leaders who work with Eastern European or Asian community members in the Central Peterborough and Wisbech areas, those who are aged 50+ and community members from affluent areas within Cambridge city. These groups have been identified as having a low take up of the vaccine and we would like to understand why this may be occurring and how to support decisions about vaccine take up.

Why have I been chosen?

You have been invited to take part in a focus groups as a stakeholders or community leader for one of the groups we would like to engage with. We would like to gain your thoughts about what messages have been shared with your communities about the vaccine and potential barriers that may lead to vaccine hesitancy. We would also like to seek support with our recruitment strategy for engaging with community members, and to inform the questions we ask.

We have gained governance approval from your organisation, but where appropriate, please ensure you have approval from your manager to participate.

Do I have to take part?

Taking part is entirely voluntary. If you decide to take part, you will be asked to sign a consent form to confirm that you understand the project and are happy to participate. If you decide to take part and then change your mind, you are free to withdraw prior to the group taking part or you can leave at any time during, without giving a reason. If you leave the discussion, we may still include information you have given. It is not possible to identify individual responses from the group discussion.

What will my participation involve?

We would like to invite you take part in an online focus group with other community leaders. This focus group will last approximately 1 hour and will take place at the following time:

DATE and TIME

If you would like to take part, please contact **Alison Ward on 01604 893559 or email: Alison.ward@northampton.ac.uk** and we will send you a link to access the focus group and ask you to fill in a consent form. The focus group will take place via Microsoft Teams. We will be available 15 mins prior if you would like to test your connection and/or complete your consent form.

We would like to audio record the focus group, this will be used only for analysis purposes to add clarity and allow the inclusion of verbatim comments. The recording will be transcribed and once transcribed will be deleted. No personal identifiable information will be used and only the researcher and transcriber will hear/see the recording. You may ask to stop the recording at any time.

What are the possible benefits of taking part?

The information will be used to inform future vaccine roll out planning and strategies. The outcomes will support understanding and decision making about the covid vaccines.

What are the possible risks or disadvantages of taking part?

We do not anticipate there will be any physical or emotional risks for you in participating. You do not have to answer any questions that you do not want to.

Will my information be kept confidential?

Your name and personal details will be kept completely confidential. Your personal details will not be recorded with your responses. The transcribed interview will be anonymised. Your name and organisation will not get used in any of the outputs from this consultation, but we may include the level of your role in connection with your comments.

While we will make every effort to ensure that you remain confidential within any outputs, however, due to the number of people we are consulting, it may be possible to identify you from your views. We would welcome your open responses, however, please only tell us something that you are happy for us to include in a report.

All data will be stored on a secure University of Northampton server where they are stored electronically. Data will be kept for 5 years and will then be confidentially destroyed.

Due to the nature of the focus group, other people in the group will know that you have taken part. If you prefer not to be seen during the focus group, you are welcome to turn your video settings off.

What if something goes wrong?

If you have any concerns about any aspect of the way you have been approached or treated during the course of this consultation, then please contact Michelle Pyer, Chair of the Faculty of Health, Education and Society's Research Ethics Committee on: 01604 892831 or Michelle.Pyer@northampton.ac.uk

What will happen to the results of the consultation?

The information will be analysed as part of a report to the funders of the project. The data may also be used to submit an article for publication in a peer reviewed journal and/or to make a conference presentation, or be used for educational purposes, this will not affect your confidentiality and all data will remain anonymous.

Who has reviewed the consultation?

This consultation has been reviewed and approved by the University of Northampton's Faculty of Health, Education and Society Research Ethics Committee and by Cambridgeshire County Council and Peterborough City Council's governance.

Contact for further information

If you have any questions about this consultation or your possible involvement, then please contact me using the contact details below.

Alison Ward, Associate Professor
Tel: 01604 893559
Email: alison.ward@northampton.ac.uk

Thank you for considering taking part in this consultation.

Community Leaders Discussion Guide

Can you tell me about which community groups you work with?

Can you tell me a little bit about your role in sharing information about the Covid vaccine with local communities?

What has been done in your local communities to share information about the vaccine?

- What messages have been shared?
- How are these messages shared?

What do you feel has been the response to this information?

- Potential barriers to take up?
- Potential positive responses?
- What has worked or not worked?
- Is there anything that you feel could have been done differently that could support future sharing of information and increase vaccine take up?

What do you think we should know to support engaging with these groups?

- Key links and contacts to share information and connect with communities?
- What ways of sharing information about the focus groups would be best?
- Is online or face to face best?
- Are there any challenges we should be aware of?
- Need for translators? Are you able to support the groups?

Is there anything we should be asking or not asking?

Is there anything else you would like to add?

Thank and close

For further information about the project or to provide feedback on the findings and how these have informed your practice, please contact:

cristina.devecchi@northampton.ac.uk

