

ORIGINAL RESEARCH: EMPIRICAL  
RESEARCH - QUALITATIVE

# Older people's experience of COVID-19 restrictions on vaccine hesitancy: A longitudinal phenomenological study to support nurse-patient vaccination conversations

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**Abstract**

**Aims:** To explore how older people's experiences of COVID-19 restrictions influenced their decision to receive a vaccine and to support nurse-patient vaccination conversations.

**Design:** A longitudinal hermeneutic phenomenological study. The application of the COREQ checklist informed the reporting of this study.

**Methods:** Data were collected through semi-structured telephone interviews with older people (age  $\geq 70$ ) during two national restrictions implemented in England due to COVID-19. Phase one of interviews occurred between April and July 2020 (six interviews), and phase two of interviews between January and April 2021 (four interviews). Data analysis was performed through content analysis.

**Results:** Thirteen older people (mean age 78) worked through six stages about their thoughts and beliefs about receiving a vaccine, which encompassed four of the five elements of the 5C model of vaccine hesitancy, confidence, convenience, calculation, collective, but not complacency. Stages included 'our only hope is a vaccine'; 'understanding and acceptance of an effective vaccine'; 'social responsibility to protect others'; 'organized but left with unanswered questions'; 'need to feel secure' and finally 'vaccination alone is not enough'.

**Conclusion:** The experience of COVID-19 restrictions by older people informed their approach of engaging with scientific information to inform their decisions to be vaccinated but also developed their sense of collective responsibility to younger generations and those at risk, which informed their adherence to restrictions and the vaccination programme.

**Impact:** Nurses are optimally placed to support older people to implement and adhere to national government restrictions as appropriate and prevent obsessive routines, and support discussions and the provision of scientific information on COVID-19 vaccinations, whilst being inclusive of older peoples' sense of collective responsibility.

**KEY WORDS**

COVID-19, hermeneutic phenomenology, interviews, nurses, older people, vaccine hesitancy

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## 1 | INTRODUCTION

Worldwide, the COVID-19 pandemic has been devastating, with 4,038,225 deaths reported by July 2021 (Worldometers, 2021), of which 152,725 occurred in the United Kingdom (GOV.UK, 2021). The proportion of deaths due to COVID-19 has consistently remained highest in those aged 70 and over, in England, between the months of March 2020 and February 2021, deaths of older adults ranged from 70% to 81% of all deaths (Office of National Statistics, 2021a). The spread of COVID-19 has been addressed through the implementation of national restrictions on the movement of people and a vaccination programme. In England, the vaccination programme was initiated in December 2020, with a focus on older people, which has resulted in the full vaccination of 95% of those aged 70–79, and 97% of those aged over 80 (National Health Service, 2021; ONS, 2021b).

The role of the nurse in vaccination programmes has been identified as both complex and essential, commencing with the planning and implementation of programmes and the training of staff and volunteers followed by the development of resources to support the public to understand each vaccine and the importance of vaccination (International Council of Nurses, 2021). In the UK, nurses have been identified to be at the heart of the COVID-19 vaccination programme, with practice, community and district nurses supporting vaccination hubs, and vaccinating people who are either housebound or reside in residential care (Evans, 2021). Nurses are also optimally placed to discuss the safety and the necessity of a vaccine with the public, as they are trusted to provide accurate and non-biased advice, reducing hesitancy, promoting confidence, and increasing vaccination rates (Burden et al., 2021; Royal Society of Public Health, 2020; UK Government, 2021).

## 2 | BACKGROUND

In England, two extended national restrictions have been implemented, these are referred to as lockdowns by the UK government, media and the public. The term lockdown is applied throughout this paper to describe the national restrictions due to COVID-19 in England. The first lockdown was initiated on 23 March 2020, which started with the closure of all non-essential high street shops and businesses, and people were only permitted to leave their homes for essential purposes only (Brown & Kirk-Wade, 2021). The laws which enforced these restrictions were gradually relaxed from 13 May and people were permitted to leave home for outdoor recreation. The laws were further relaxed from 1 June, people were permitted to meet up to six other people outside. Furthermore, during the summer of 2020 indoor dining and hotels were allowed to reopen.

The second lockdown in England was initiated on 6 January 2021 and the same laws and restrictions of lockdown were once again in place. The only exception was the formation of a support bubble for people who lived on their own, which allowed them to meet with one person during the lockdown. The government then implemented a four-step roadmap to reduce restrictions, step 1 began on 8 March,

schools and colleges reopened, and gatherings of up to six people or two households were allowed outside. Step 2, on 12 April, non-essential shops and businesses re-opened, including the serving of food outside. Step 3, on 17 May, outdoor gatherings of up to 30 people and family gatherings in doors were permitted, and indoor services and entertainment re-opened. Step 4, on 26 July, final restrictions were lifted, with the exception of facemasks, which remained mandatory in certain public spaces (Brown & Kirk-Wade, 2021).

An important element to support the relaxation of national restrictions was the implementation of a vaccination programme, with the aim to vaccinate all adults, however in England, to date, not all adults, who are eligible, have been vaccinated (National Health Service England, 2022). The decision making process to receive COVID-19 vaccination has begun to be explored, with a focus on vaccine hesitancy. The term vaccine hesitancy describes an approach to vaccine decision making, acknowledging there is a continuum from acceptance to refusal of a vaccine or all vaccines, which is influenced by several complex and context-specific factors (Kumar et al., 2016). The SAGE Working Group defines vaccine hesitancy as the: "... delay in acceptance or refusal of vaccination despite availability of vaccination 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." (Macdonald et al., 2015, p. 4163).

The 5C model of vaccine hesitancy is one model that has been developed, which includes five elements that impact the decision to receive a vaccine. The five elements are confidence, convenience, calculation, collective, and complacency (Betsch et al., 2018; Oduwole et al., 2019). Confidence is defined as an individual's confidence in the safety and effectiveness of a vaccine, but also the confidence in the people and the system in which the vaccine is delivered, including the motivation of the government for proposing the vaccine. Convenience is the ease with which services providing the vaccine can be accessed, and the willingness of individuals to pay for the vaccine. The calculation is the process individuals undertake to support their decision to or not to receive a vaccine, which involves intensively searching for information to understand the risk of the vaccination and/or the disease. Collective or collective responsibility is implied when individuals or groups of people make the decision to be vaccinated to protect others, through a sense of social responsibility. Finally, complacency is the belief that the need for a vaccination is low, due to the low risk and impact of the disease (Betsch et al., 2018; Oduwole et al., 2019).

Nurses are optimally placed to reduce vaccine hesitancy and support confidence in vaccination programmes through open, honest, and non-judgemental conversations (Agnew, 2022; Razai et al., 2021). However, discussions with patients about COVID-19 vaccine hesitancy have been identified by nurses as complex (Cassidy et al., 2021). Nurses identified a lack of guidance for such discussions and patients' mistrust in the system as barriers, although through nurse education and the development nurse-patient relationships these barriers could be addressed (Cassidy et al., 2021). Nurses may be further supported through the strategies, which have been developed to support healthcare professionals to address vaccine hesitancy and the misinformation presented on social media

about COVID-19 vaccinations (Jones & James, 2021; Lewandowsky et al., 2021). Therefore, there is an opportunity for nurses, especially practice, community and district nurses, to promote vaccination acceptance and uptake through the application of interventions and the ethos of 'Making Every Contact Count' as suggested by Public Health England (2016).

In the UK and Ireland increased vaccine hesitancy for the COVID-19 vaccinations has been associated with those who are less likely to obtain information from authoritative and reliable sources due to an underlying mistrust in these sources, those who are younger (16–24 years), and with low levels of education (Murphy et al., 2021; Robertson et al., 2021). Older people who identified high levels of trust in formal sources, low levels of trust in social media, and moderate to low levels of trust in family and friends, were more likely to receive the COVID-19 vaccine (Tan et al., 2022). In both the UK and USA, increased vaccine hesitancy for COVID-19 vaccinations has been associated with racial discrimination (Robertson et al., 2021; Savoia et al., 2021). Whilst increased vaccine hesitancy in France was associated with those who reported no long-term chronic conditions (Schwarzinger et al., 2021). However, in Slovenia and France, those who received their annual flu vaccine were less likely to have vaccine hesitancy about the new COVID-19 vaccinations (Petrvac et al., 2021).

Studies specifically exploring COVID-19 vaccine hesitancy in those aged 50 and older, have identified this population is concerned with the possible side effects of the new vaccine, the effectiveness of the vaccine and finally, these older people believed they were in good health and did not need the vaccine (Al-Hanawi et al., 2021; McSpadden, 2022). However, none of the studies has explored the impact of national restrictions on older people's COVID-19 vaccine hesitancy. The unique setting of an ongoing pandemic with national restrictions and the rapid development of a vaccine is distinctive to COVID-19. Therefore, there is a need to explore how and if the national restrictions impact vaccine hesitancy of those most vulnerable, which is those aged 70 and over. The understanding of vaccine hesitancy, the beliefs, or decision making process to receive a COVID-19 by older people is essential, to address COVID-19 vaccine hesitancy. This understanding will support practice, community, and district nurses to enable this vulnerable population to make an informed decision through the provision of relevant and appropriate information and discussions.

### 3 | THE STUDY

#### 3.1 | Aim

The aims of this study were to explore how older people's experiences of COVID-19 restrictions influenced their decision to receive a COVID-19 vaccine and to support future nurse–patient vaccination conversations.

#### 3.2 | Design

The first phase of this longitudinal study explored the experiences of 19 older people during the first extended national lockdown in England and the Republic of Ireland. Participants completed six semi-structured interviews between 6 April 2020 and 10 July 2020, which have been presented elsewhere (Brooke et al., 2022; Brooke & Clark, 2020). The second phase of this longitudinal study included a subset of this cohort ( $n = 13$ ), who completed four interviews during the second extended national lockdown in England, at monthly intervals from 8 January to the 23 April 2021. This paper explores data from both the first and second phases, with relevance to the research question: 'How do older people's experiences of COVID-19 influence their decisions to receive a COVID-19 vaccine?'

#### 3.3 | Theoretical framework

The hermeneutic phenomenological approach of this study was informed by the work of Gadamer (Cohen et al., 2000), who focused on the importance of understanding the lived experience of phenomena and not the phenomenon itself (Gadamer, 1989). The approach of Gadamer's hermeneutic phenomenology is the belief that people cognitively interpret and make sense of a lived experience through language. The interpretation of a lived experience is a product of the time and place the experience occurred and is an evolving process through a dialectical interaction with the interpreter, which in this case is the researcher (Lavery, 2003). The application of a longitudinal hermeneutic phenomenological approach supported the exploration and understanding of how the lived experiences of national restrictions due to COVID-19 of older people influenced their decision-making process about the COVID-19 vaccine.

#### 3.4 | Sampling and recruitment

Sampling for the first phase of this longitudinal study included non-probability convenience sampling, which supported the identification and recruitment of older people living at home. This approach was applied to support rapid recruitment and enable prospective exploration of lived experiences of household isolation due to COVID-19. Recruitment occurred through the posting of an advert on social media, such as WhatsApp neighbourhood groups, the Nextdoor App and Twitter, by staff in the Faculty of Health, Education and Life Sciences at the researcher's institution. Potential participants contacted the first author by either phone or email for further information. The recruitment of the second phase of this study involved re-contacting participants from the first phase, who had agreed to further follow-up interviews.

### 3.5 | Data collection

Data were collected through semi-structured telephone interviews, by the first author, which was audio recorded and data transcribed verbatim (refer to Table 2). The interview schedule consisted of open-ended questions, in the first phase of this longitudinal study, these questions explored elements of social loneliness, social networks and support (Berkman & Syme, 1979; Powers et al., 2004; Russell, 1996), and in the second phase of this study, the questions included elements of vaccine hesitancy (Oduwole et al., 2019).

Telephone interviews were the most appropriate form of data collection to ensure the safety of both participants and the researcher in the current and changing COVID-19 restrictions. The benefit and challenges of telephone interviews in a hermeneutic phenomenological study were acknowledged. The positive elements of telephone interviews included the distribution of power between the researcher and the participant, and an enhanced level of anonymity, which supported participants to discuss their feelings and reduced the need to provide socially acceptable answers. These positive elements were evident in the current study when participants asked the researcher her age and her level of seniority in the university, and openly disclosed it was impossible to estimate from her voice alone. The negative elements of telephone interviews included the loss of information that supports communication, such as visual nonverbal behaviours. However, the adherence to a framework to support data collection via telephone interviews enhanced the development of rapport and communication with participants.

### 3.6 | Ethical considerations

Ethics approval was obtained from the Health, Education and Life Sciences Faculty Academic Ethics Committee at Birmingham City University on 2 April 2020 for phase one of this longitudinal study (BROOKE/6290/R[B]/2020/Apr/HELS FAEC) and an amendment was submitted and approved for phase two of this study on the 6 January 2021. Each participant provided oral consent at the beginning of the research, which was audio recorded. At the beginning of each interview, participants were reminded that their contribution was voluntary, they could stop participating at any time without any implications. Participants were also reminded at the beginning of each interview, the interview would be audio-recorded, as this was not an obvious process due to the nature of the telephone calls.

### 3.7 | Data analysis

Data were analysed from both phases 1 and 2 of this longitudinal study to answer the research question presented in this paper. The application and adherence to the principles of content

analysis in the hermeneutic phenomenological approach of this longitudinal study enabled the exploration of how older people's experiences of COVID-19 influenced their decision-making to receive a COVID-19 vaccine. The application of content analysis adhered to the three phases as described by Forman and Damschroder (2008). The first phase of analysis began with the reading and rereading of the transcripts to support the process of engagement and immersion in the data. This process was completed by both authors (as were all three phases) and provided an understanding of each participant's data as a whole, prior to the commencement of analysis and identifying discrete units in the data. The second element, which was essential to focus the analysis on the research question, was the deductive development of codes, and then the development of codes into patterns. The third element, the hermeneutic or interpretation process, supported further reduction and analysis of the data, and the identification of patterns into themes.

### 3.8 | Rigour

The development of this paper was supported by adhering to the Consolidated Criteria for Reporting Qualitative studies checklist (Tong et al., 2007), which has supported the rigour of the information presented. Elements of rigour, such as credibility, transferability, dependability and confirmability reflexivity as described by Lincoln and Guba (1985) have been addressed. First, credibility was established by ensuring the findings represented the developing thoughts and beliefs of participants over time by maintaining close proximity to the data. Second, transferability has been addressed through the thick and rich description of the setting, environment, participants, and research processes to allow a realistic conclusion on transferability. Thirdly, dependability was maintained throughout the study with clear audit trails, all interviews were completed by the same author, and the analysis of the data by both authors, to ensure the findings were supported by the data. Fourthly, confirmability is supported by the direct quotes presented in this paper, to allow the reader to understand how the stages have clearly derived from the data. Finally, both authors recognized their own personal biases, preferences and preconceptions on the national restrictions and COVID-19 vaccination programme, and acknowledgement that during this process both authors as nurses were vaccinated.

## 4 | FINDINGS

### 4.1 | Participants

Of the participants who had completed the first phase ( $n = 19$ ), 13 had agreed to be contacted for further research, of these, all 13 were recruited for the second phase of this longitudinal study, their ages ranged from 71 to 89 (mean age: 78), more women ( $n = 9$ ) than

men ( $n = 4$ ) were recruited, participants lived alone ( $n = 6$ ) or with a spouse ( $n = 7$ ). All participants lived in a single occupancy house with a garden and had the support of either friends and family or people living in their community. Interviews ranged from 24 to 56 min. Participants received their first vaccination of either Pfizer or Astra Zeneca between the 14 December 2020 and the 12 February 2021, only one participant refused to have a COVID-19 vaccine at the time he was offered (refer to Table 1).

## 4.2 | Overview of six stages

This study completed an exploration of how the lived experience of national restrictions due to COVID-19 impacted the thoughts and beliefs of those aged 70 and over on receiving a COVID-19 vaccination. On completion of the content analysis, six stages were identified, which each participant worked through during this longitudinal study. The stages identified from the data of our study, capture the lived experience of participants as they occurred through the pandemic and national restrictions. The evolving nature of both the pandemic and the rapid development of a vaccine, have influenced our participants over time, and our stages demonstrate how their thinking and beliefs have also changed and developed during this time. The first stage identified in phase 1 of this study was 'our only hope is a vaccine'. The second and third stages were identified at the end of phase 1 and the beginning of phase 2, which included 'understanding and acceptance of an effective vaccine' and 'social responsibility to protect others'. The last three stages occurred as phase 2 progressed, including 'organised, but left with unanswered questions', 'need to feel secure' and finally 'vaccination alone is not enough'.

### 4.2.1 | Stage 1: Our only hope is a vaccine

During the first extended lockdown in England, and prior to the development and implementation of COVID-19 vaccinations, participants began to discuss the need for a vaccine. All participants expressed hope that a vaccine would support their ability to survive COVID-19, both physically and psychologically, and enable them to return to some sort of 'normal' life with the reduction of COVID-19 restrictions. The language participants used to describe potential vaccines, identified the hope they attached to an effective vaccine, which included adjectives such as incredible and wonderful.

Participants openly discussed their concern they would not survive if they contracted COVID-19 due to the risks associated with their age, and their only hope was a vaccine. However, participants also acknowledged the reality of their hope, as the development of a vaccine would take time, and even with the implementation of a vaccine, life would not return to normal:

Even me in my 80s, it is going to knock me sideways being in my 80s that is if I survive it, but unless there is an incredible vaccine, which will be two years in the making ...

(Louise)

So, whatever happens I hope we are around to talk about things in the future, perhaps a vaccine will come up and we will get back to some normality, although I don't think normal is going to be the same, we expect it to be, or how we know it from the past.

(Trevor)

TABLE 1 Overview of participants and vaccinations

Participant (age)	Living environment	Vaccine	First vaccine	Second vaccine
Barbara (84)	Lives alone	Pfizer	18 Dec 20	1 Jan 21
Jessica (71)	Lives with husband	Pfizer	2 Feb 21	26 Apr 21
Katherine (76)	Lives with husband	Pfizer	19 Jan 21	Unknown
Louise (83)	Lives alone	Pfizer	11 Jan 21	7 Apr 21
Peter (75)	Lives with wife	Astra Zeneca	15 Jan 21	Unknown
Rosemary (74)	Lives with husband	Astra Zeneca	15 Jan 21	9 Apr 21
Martha (75)	Lives with husband	Unknown	19 Jan 21	12 Apr 21
Edith (87)	Lives alone	Pfizer	13 Jan 21	1 Apr 21
Freda (89)	Lives alone	Pfizer	14 Dec 20	Waiting for a date
Stephen (85)	Lives alone	—	Declined	—
Trevor (72)	Lives with wife	Astra Zeneca	12 Feb 21	17 Apr 21
Hilda (71)	Lives alone	Astra Zeneca	30 Jan 21	19 Apr 21
Walter (71)	Lives with wife	Astra Zeneca	25 Jan 21	20 Apr 21

Note: All names are synonyms to ensure the anonymity of participants.

TABLE 2 Interview schedule

Phase 1		Phase 2	
Interview	Completion dates	Interview	Completion dates
First	6–15 April 2020	Seventh	8–12 January 2021
Second	20–29 April 2020	Eight	5–12 February 2021
Third	4–13 May 2020	Nineth	5–12 March 2021
Fourth	18–27 May 2020	Tenth	9–23 April 2021
Fifth	1–10 July 2020		
Sixth	29 June to 7 July 2020		

The ability to return to some sort of 'normal' life was extremely important for participants across both national lockdowns in England. Although, participants recognized and discussed the concept of normality, the opportunity of returning to normal would be unlikely. Instead, there would be a new kind of normal, which could only be possible following the implementation of an effective vaccine, as Edith expressed:

I don't see us getting back to normality for a while, if ever actually. Maybe, presumably when there is a vaccine, possibly we will get back to normal, but I think some things will always be different, like a lot of people will continue to work from home, and less travelling.

The hope for and implementation of a vaccine did not stop participants from discussing the need to maintain the current COVID-19 restrictions. Participants identified the need for the continuation of national lockdowns to support the decrease of both COVID-19 infection and mortality rates. Therefore, the only real hope was that of a vaccine, as expressed by Walter:

The idea with normal, the new normal is that it is something that you don't want to stick with. Until there is some sort of antidote or vaccine, I do not think there is going to be any vast amount of opening-up of society, until the vaccine that they are testing now.

Participants discussed their only hope to survive the pandemic and to support them to return to some kind of normal was an effective vaccine.

#### 4.2.2 | Stage 2: Understanding and acceptance of an effective vaccine

All participants in this study discussed the need to follow the development of the various vaccines, and the need to understand the processes as well as the level of effectiveness of each vaccine, which supported their acceptance of COVID-19 vaccines.

Participants' adherence to the news and following the development of the various vaccines supported their understanding of these

processes and the efficacy of these vaccines. One participant understood and discussed the differences between two of the vaccines, providing a rationale why her husband, who had a compromised immune system, required a certain vaccine. Conversations with peers, informed neighbours and friends also supported an acceptance of an effective vaccine. Walter, who was quite outspoken about his view, discussed his scientific knowledge and the influence of his neighbour, who was a retired healthcare professional:

I am very much in favour, I read the New Scientist, and everything I have read about the safety of the vaccine, the efficacy and all of that, and talking to our next door neighbour, who is a retired GP, it is all – why wouldn't you have the vaccine, are you feeling stupid and suicidal. I very much understand the science, the three that have been approved have been trialed on tens of thousands of people, including a fair proportion that are in my age group.

All participants in this study followed the development of the COVID-19 vaccines, and the efficacy of each vaccine, and understood and accepted the science of the vaccines produced.

#### 4.2.3 | Stage 3: Social responsibility to protect others

During the second extended national lockdown in England and the implementation of the COVID-19 vaccination programme, participants began to discuss the need to wait their turn to be vaccinated. Participants strongly believed in the need to prioritize vaccinations for those who were at more risk of coming into contact with COVID-19. Participants acknowledged they were at a lesser risk if they adhered to the government restrictions, which would keep them safe, compared with those who had to go out to work.

Participants defined those who were more at risk of coming into contact with COVID-19 as those providing frontline services, especially healthcare professionals who were caring for people with COVID-19. Due to their belief of being at a lower risk, participants were prepared to wait 'their turn' for their vaccination, although all participants stated they would definitely receive the vaccine, as stated by Katherine:

When my turn comes, I will definitely have it, and my husband feels the same. As long as I know people who need it more than I do, the frontline people who deal with it every day, get it first then I am happy with that, and when my turn comes I will definitely have it.

An element of contention for participants was the definition of frontline staff. In England, frontline staff were classified as health and social care workers who provided essential or emergency services in the National Health Service (Department of Health and Social Care, 2021). However, participants discussed the importance and need for the classification of teachers as frontline staff. This classification focused on teachers who continued to teach children of health and social care professionals in the classroom, which in the UK continued throughout all restrictions and lockdowns. Stephen, the one participant, whom to date had refused to receive a vaccine, strongly believed teachers should receive their vaccinations prior to himself, and although he acknowledged his vulnerability due to his age, he still believed his risk was lower than that of teachers:

I think teachers are in a much more vulnerable position, maybe the children aren't vulnerable, but I think the adults are. So, on the basis of that I would rather wait my turn as it were, but I do recognize my age an immune system is less perfect than theirs, so I do recognize the downside to me as it were, but I see them as being more exposed than I am.

Some participants, such as Stephen, recognized the impact of their age on their immune system. Although, other participants, especially those in their early 70s acknowledged that due to their age, this placed them into the vulnerable category, but they did not feel vulnerable, as Hilda explained:

I have had my vaccination on Saturday, so that is that boxed ticked, it is neither here nor there to me, from my perspective, I know there are people who are much more vulnerable or are vulnerable, and I don't feel I am, my age tells me I am vulnerable, but I am not!

Participants all discussed the need for frontline keyworkers to receive the COVID-19 vaccine before themselves, as they believed themselves to be at a lower risk of coming into contact with COVID-19, and not as vulnerable as their age might dictate.

#### 4.2.4 | Stage 4: Organized, but left with unanswered questions

The implementation of the COVID-19 vaccination programme in England focused on those aged 70 and older. This approach supported participants in this study to receive their vaccinations at the beginning of the second extended national lockdown. During this time,

participants' hope for a vaccine, became a reality, as they received their vaccinations and positively discussed the organization of the programme. However, the changing recommendations by the government about vaccinations, particularly the time between the two doses, left participants both confused and with unanswered questions.

All participants discussed their experiences of receiving their first COVID-19 vaccination, and considered the vaccination rollout was 'well organised' (Katherine), 'incredibly efficient' and 'unbelievably efficient' (Louise), 'brilliant, absolutely brilliant' (Martha), '*frightfully organised*' (Edith), 'ultimately organised' (Walter), although Hilda found the organization slightly overbearing:

It was excessively organised, it was at a big arena, so when it came time for the over 70s, I was on their list, and within two days I was being vaccinated, and they had plenty of volunteers that were not letting you move even slightly out of your row.

All of the participants praised both the staff and the large number of volunteers working in the vaccination centres. Participants in this study received their vaccinations in different locations and sites, which included arenas, stadiums, superstores and GP surgeries. Rosemary, whose husband was older than her, explained she had accompanied him to have his vaccine, and the staff were supportive and without question administered her COVID-19 vaccine without an appointment:

I hadn't been invited, my husband had, but I am 75 on Sunday. So I just went with him, and I said I hadn't been called for my vaccination, but I am due to be given one, and she said no problem, and I went straight in, no problem at all, I was really quite pleased about it!

During the rollout of the vaccination programme in the UK, the government made the decision to extend the period between the first and second doses. This decision left participants with many unanswered questions, which included, why the timeframe of vaccinations changed, what was the impact on their immunity and was there a negative impact on those who had yet to receive a vaccine, as expressed by Katherine and Freda, although Freda believed no-one knew the answers:

I have had my first vaccine, but feel the government have changed their minds as the second one is now 12 weeks away and not 3. I am not sure if that is based on accurate data, but it raises a lot of questions and can you have a second dose of a different vaccine.' Katherine

I don't know what to do, as now I can't have the second one, and I don't know whether I can incubate the disease and make it worse. But nobody seems to know, this wouldn't have happened if politicians had just listened to the scientists, but I don't know who knows.' Freda

Participants discussed the rollout of the vaccination programme as well organized and the supportiveness of staff, many of whom were volunteers. However, the changing recommendations of the time between the two doses of each vaccination by the government left participants with many unanswered questions.

#### 4.2.5 | Stage 5: The need to feel secure

The need to feel secure emerged from the participants need to be protected from high infection rates, so they could visit and support their families. However, participants equally acknowledged until the majority of the population were vaccinated, they would not be totally secure.

Many participants attributed the need to feel secure to enable them to visit their family members, especially their grandchildren, but also their friends and neighbours. The need to feel secure was a focus of the participants in this study, but also their children, who wished to protect their parents, which led to some frustrating encounters as Rosemary explained:

It was nice to see them (son and family), even though we cannot go into the house, and we were shouting at them through the letterbox, but this is frustrating, but until we get our vaccinations ... I think I will feel happier and more secure once I have had the vaccination.

Participants related the need to feel secure during the second extended national lockdown, due to the high infection and mortality rates during January and February 2020. During these months participants welcomed the vaccine and felt a sense of relief on receiving the vaccine. This may be due to the time of year of the second national lockdown, which occurred during the winter months, and was described by Barbara as 'more miserable':

This lockdown hasn't been as frightening as the first lockdown, but it has been more miserable, and it doesn't look very promising (increase in infection rate), so it was such a relief to get the vaccine.

Participants were realistic in their need to feel secure and understood they could not feel totally secure until the majority of the population had received a vaccine. However, participants simultaneously believed the vaccine supported them to feel more confident to leave their homes, as expressed by Katherine and Jessica:

I do feel the vaccination is our best hope, but I did expect to feel a bit more of a buzz, but I am not naïve and think I have been vaccinated and I can do whatever I want, as I think until everyone has had it, no one is secure.

(Katherine)

I am going to the shops now, I think having had the jab, you feel a little bit more confident is the right word, you feel safer if that makes sense. I think I have more confidence to be out because I have had the vaccine.

(Jessica)

Participants all discussed the need to feel secure during the second extended national lockdown in England through receiving a COVID-19 vaccine, which supported them to feel a sense of relief and more confidence to leave their homes.

#### 4.2.6 | Stage 6: Vaccination alone is not enough

Participants' belief and need for the vaccine did not stop them from acknowledging that a vaccine alone was not sufficient at this time to halt the progress of COVID-19. These beliefs influenced participants' behaviour as they continued to maintain COVID-19 restrictions, and even though the government began to relax the restrictions, participants did not change their restrictions.

Participants viewed the vaccine as a 'light at the end of the tunnel', but with caution, and stated there was still a long journey to travel. Rosemary discussed not wanting to push her luck and the need to keep her guard up against the virus to be able to see this pandemic to the end:

I do think there is a light at the end of the tunnel, but I don't push my luck, we have got this far on the journey so why muck it up at the end, so I think we mustn't get sucked into the fact we have had the vaccine, we still need to keep our guard up against COVID.

Even when participants had received two doses of the COVID-19 vaccine, this did not always influence a change in the restrictions they had put in place, as the ongoing pandemic was still a concern and at times remained scary. Participants continued to maintain their restrictions even when the national restrictions changed, as they were not prepared to take the chance, as Martha explains:

We have the second one (vaccination) on Monday, but I am not sure it is going to make a huge amount of difference really, well ... in terms of protection it will, but what we do. I still won't be going shopping, and I don't want to go out and eat a meal, it is still a bit scary'.

A couple of participants discussed only feeling safe in their own home, even following the administration of two doses of the COVID-19 vaccine. These feelings impacted the participants' behaviours, as they refrained from leaving or socializing in the new reduced restrictions. Both the participants and their families recognized the need to work through these feelings and to rationalize these beliefs. However, these participants still found this a difficult process, as Martha explains:



I have set myself a target, I believe the full benefit of the vaccination is at 30 days, so after 30 days I am going to go and do my shopping, rather than have Sainsbury's deliver my shopping, so that is my target, I think you have to set yourself targets.

However, participants' wariness of letting their guard down and the need to remain cautious, was on occasion, reinforced by healthcare professionals. Interactions with healthcare professionals sometimes left participants feeling confused and reinforced the need to stay at home and self-isolate to remain safe, as Barbara described:

I said to the doctor I was looking forward to going to the supermarket, and she said 'oh don't, it is not worth the risk', so I haven't been anywhere, and then you listen to the news, and you are not sure how protected you are, I just don't know, I haven't done anything.

Participants in the current study recognized the vaccine as a 'light at the end of the tunnel', but the vaccination alone was not sufficient to stop the spread of COVID-19, and national restrictions were important and necessary.

## 5 | DISCUSSION

The lived experience of two extended national lockdowns in England by people over the age of 70 influenced their understanding, beliefs and willingness to receive a COVID-19 vaccine. Six stages were identified, which included our only hope is a vaccine, understanding and acceptance of an effective vaccine, social responsibility to others, organized, but left with unanswered questions, the need to feel secure and lastly, vaccination alone is not enough. Due to the similarity of our finding to the 5C model of vaccine hesitancy (Oduwole et al., 2019), our discussion will explore and develop each concept of the 5C model. Our discussion will also focus on the relevance of these concepts for practice, community and district nurses to support informed vaccine discussions with older people.

### 5.1 | Stage 1: Our only hope is a vaccine

The first stage of our study can be interpreted as collective responsibility with the 5C model of vaccine hesitancy. This concept has been further defined by Lindholt et al. (2021) as the collective trust in others to adhere to restrictions and vaccination programmes, and the element of abiding to restrictions as a strong predictor of vaccine acceptance (Lindholt et al., 2021). Our participants expressed the need for all to adhere to the national restrictions for themselves, others and society to return to some sort of normal life. This is similar to the hope to return to some kind of 'normality' by adults in Italy (Marinaci et al., 2021) and older adults in Southern Switzerland (Fadda et al., 2021). All participants in our study adhered to the

restrictions, sometimes obsessively, and implemented their own extra restrictions (Brooke et al., 2022; Brooke & Clark, 2020). The continued and sometimes negative impact of adhering to strict restrictions may have impacted participants' need for an effective vaccine and vaccination programme. The understanding of older adults' adherence to COVID-19 is essential for nurses, to enable them to empower this population to implement and maintain appropriate restrictions depending on current government advice and their specific risks.

### 5.2 | Stage 2: Understanding and acceptance of an effective vaccine

The second stage of our study can be interpreted as confidence, as participants in the current study expressed confidence in the safety and effectiveness of the COVID-19 vaccines, which influenced their intention to receive a vaccine. This is contrary to the work of McSpadden (2022) and Al-Hanawi et al. (2021), who identified older people has concerns about the side effects and the effectiveness of the COVID-19 vaccines. However, our results are similar to that of the international study conducted by Dye et al. (2021), which identified individuals' attitude towards science, was a strong predictor of vaccine acceptance, than psychosocial or COVID-19-related variables, such as risk, due to age or co-morbidities. In our study science was also identified as being more important than government effectiveness, as participants questioned the government's decisions on the rollout of the vaccine, but not the science supporting the vaccine. Attitudes towards the science of the vaccine may be mediated or moderated by current infection rates. Individuals in the first wave of the pandemic in China, reported willingness to receive a COVID-19 vaccine, although when the vaccine was available and the infection rates reduced, individuals expressed the need to delay their vaccination until the safety of the vaccine had been confirmed (Wang, Lu, et al., 2021). Nurses are optimally placed to support the provision of scientific information on COVID-19 vaccinations in a format that is suitable for the general public, education and guidance have been developed to support these discussions (Gordon et al., 2021; Lewandowsky et al., 2021).

### 5.3 | Stage 3: Social responsibilities to others

The third stage of our study closely aligns with collective responsibility, as all participants believed they had a collective responsibility to protect frontline staff and those at a higher risk of infection from COVID-19. Participants believed these people required the vaccine as a priority and before them. Unlike the definition of collective responsibility in vaccine hesitancy, participants believed they did not require the vaccine to protect others, but others, such as frontline staff, required the vaccine. Other studies have identified participant's beliefs on the distribution of the vaccine, such as commencing with younger individuals and/or children (Fadda et al., 2021; Giubilini et al., 2020).

In COVID-19 vaccine hesitancy, this is an important element of social responsibility and is supported by a systematic review by Wang, Yang, et al. (2021) who identified the main reason individuals stated for receiving a COVID-19 vaccine was to protect both others and then themselves. Therefore, it is imperative for nurses to understand older people's sense of social or collective responsibility and to be competent to engage in conversations to explore the element of social responsibility, which includes the vaccination of older people to support, albeit indirectly, the burden on acute healthcare services.

#### 5.4 | Stage 4: Organized but left with unanswered questions

The fourth stage of our study aligns with both convenience and calculation, an element of convenience involves the public perception of the ease of accessing services and receiving a vaccination. The ease of receiving a vaccination has been addressed through vaccination hubs in local pharmacies and on worksites to ensure convenience (Badr et al., 2021). In England, the national rollout of the COVID-19 vaccination programme included the implementation of small and large vaccination hubs in villages, towns and cities. However, minority ethnic groups and those from a lower economic status, who routinely experience inequality in healthcare, may also experience inequality in convenience due to language barriers, poor internet access (to book appointments) and lack of transportation (Njoku et al., 2021). Interventions by nurses to address issues of inequality in vaccination programmes have begun to be addressed, by engaging directly with local communities (Burden et al., 2021). The calculation was also an event in our study, as participants discussed their level of protection following their first vaccine and sought information to understand the impact of waiting for 12 rather than 3 weeks before their second vaccination. However, the calculation has not been explored in older people about COVID-19 vaccination, and further qualitative research is required to understand the possible positive and negative impacts on older people's vaccine hesitancy.

#### 5.5 | Stage 5: The need to feel safe and stage 6: Vaccination alone is not enough

The results from this study provide a rationale for the need to understand beliefs, attitudes, and behaviours beyond that of vaccine hesitancy, as Stages 5 and 6 demonstrate the ongoing nature of risk calculations and collective responsibility following vaccination. These stages in our study were informed by participants' understanding of vaccines, and the protection they provide, which was not full immunity, and transmission of the virus to others was not eliminated. Kerr et al. (2021) identified these beliefs do not reduce the intentions to be vaccinated, but simultaneously do not increase intentions to continue to engage in restrictive or protective behaviours post-vaccination, so further research exploring these elements is required. These stages highlight the continued need for nurses

to support older people to understand the restrictions that remain necessary due to national guidelines, with consideration of their individual risks, to empower them to make informed decisions.

#### 5.6 | Limitations

Due to the recruitment method applied in this study, it is a possible limitation on the wider generalization of the results, due to the recruitment of older individuals who engaged through social media and emails. A limitation is the small unrepresentative sample in this study, as all participants were white, of an English heritage, and lived in single-occupancy houses with a private garden. Lastly, only 13 of the original participants from phase 1 of this study contributed to phase 2, which may add an element of bias.

### 6 | CONCLUSION

The six stages of decision-making, beliefs and attitudes towards COVID-19 vaccinations need to be understood and addressed to support effective vaccination programmes. However, these stages may only be relevant to vaccines developed during a global pandemic that has directly affected individual's daily lives. The six stages identified in this study support four of the five elements of the 5C model of vaccine hesitancy. The only element not identified was that of complacency, which might not be relevant in a global pandemic. An important element identified in older people's vaccine hesitancy is a collective responsibility and their role in supporting society and the future of society. Collective responsibility in this study went beyond that of vaccination and adherence to national restrictions and the continuation of restrictions following vaccination.

An understanding of the stages of decision-making, beliefs and attitudes towards COVID-19 vaccinations is essential for nurses to engage in vaccination conversations with patients. Nurses are optimally placed to engage in vaccination conversations with older people and support them to implement and maintain appropriate restrictions depending on current government advice in relation to their specific risks and needs. Our study also suggests nurses need to be competent to engage in conversations to explore an individual's sense of social or collective responsibility with regard to national restrictions or receiving the COVID-19 vaccine. Finally, nurses need to be able to provide, disseminate, and discuss scientific information with older people, to support their understanding of the safety and effectiveness of a COVID-19 vaccine. This guidance will support nurses to enable and empower their patients to make informed decisions about ongoing COVID-19 vaccinations but can also be applied to support future vaccination programmes.

#### AUTHOR CONTRIBUTIONS

The first author was involved in the concept development and data collection of the study, but both authors were involved in the data analysis and construction of this paper.

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## CONFLICT OF INTEREST

No conflict of interest has been declared by the authors.

## PEER REVIEW

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## DATA AVAILABILITY STATEMENT

No data is available from this study as guided by the ethical approval from our institution.

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## REFERENCES

- Agnew, T. (2022). Improving confidence in vaccination programmes to boost uptake. *Nursing Times*, 118(1), 18–21.
- Al-Hanawi, M. K., Alshareef, N., & El-Sokkary, R. H. (2021). Willingness to receive COVID-19 vaccination among older adults in Saudi Arabia: A community-based survey. *Vaccine*, 9, 1257. <https://doi.org/10.3390/vaccines9111257>
- Badr, H., Zhang, X., Oluyomi, A., Woodard, L. D., Adepoju, O. E., Raza, S. A., & Amos, C. I. (2021). Overcoming COVID-19 vaccine hesitancy: Insights from an online population-based survey in the United States. *Vaccine*, 9, 1100. <https://doi.org/10.3390/vaccines9101100>
- Berkman, L. F., & Syme, S. L. (1979). Social networks, host resistance, and mortality: A nine-year follow-up study of Alameda County residents. *American Journal of Epidemiology*, 109, 186–204. <https://doi.org/10.1093/oxfordjournals.aje.a112674>
- Betsch, C., Schmid, P., Heinemeier, D., Korn, L., Holtmann, C., & Böhm, R. (2018). Beyond confidence: Development of a measure assessing the 5C psychological antecedents of vaccination. *PLoS One*, 13(12), e0208601. <https://doi.org/10.1371/journal.pone.0208601>
- Brooke, J., & Clark, M. (2020). Older people's early experience of household isolation and social distancing during COVID-19. *Journal of Clinical Nursing*, 29(21–22), 4387–4402. <https://doi.org/10.1111/jocn.15485>
- Brooke, J., Dunford, S., & Clark, M. (2022). Longitudinal impact of household isolation, social distancing and shielding on older adults during the COVID-19 pandemic. *International Journal of Nursing Older people*, e12459. <https://doi.org/10.1111/opn.12459>
- Brown, J., & Kirk-Wade, E. (2021). Briefing paper, number 9068: Coronavirus: A history of English lockdown laws. <https://researchbriefings.files.parliament.uk/documents/CBP-9068/CBP-9068.pdf>
- Burden, S., Henshall, C., & Oshikanlu, R. (2021). Harnessing the nursing contribution to COVID-19 mass vaccination programmes: Addressing hesitancy and promoting confidence. *Journal of Advanced Nursing*, 77(8), e16–e20. <https://doi.org/10.1111/jan.14854>
- Cassidy, C., Langley, J., Steenbeek, A., Taylor, B., Kennie-Kaulbach, N., Grantmyre, H., Stratton, L., & Isenor, J. (2021). A behavioral analysis of nurses' and pharmacists' role in addressing vaccine hesitancy: Scoping review. *Human Vaccines & Immunotherapeutics*, 17(11), 4487–4504. <https://doi.org/10.1080/21645515.2021.1954444>
- Cohen, M. Z., Kahn, D. L., & Steeves, R. H. (2000). *Hermeneutic phenomenological research: A practical guide for nurse researchers*. Sage Publishers.
- Department of Health and Social Care. (2021). *What is a front-line health & social care worker?* Retrieved from <https://covid-19.hscni.net/guidance/what-is-a-front-line-health-social-care-worker/>
- Dye, T. D., Barbosu, M., Siddiqi, S., Ramos, J. G. P., Murphy, H., Alcantara, L., & Pressman, E. (2021). Science, healthcare system, and government effectiveness perception and COVID-19 vaccination acceptance and hesitancy in a global sample: An analytical cross-sectional analysis. *BMJ Open*, 11, e049716. <https://doi.org/10.1136/bmjopen-2021-049716>
- Evans, N. (2021). Nurses take the lead in the biggest vaccine roll-out in UK history. *Nursing Standard*, 36(1), 8–10.
- Fadda, M., Suggs, L. S., & Albanese, E. (2021). Willingness to vaccinate against Covid-19: A qualitative study involving older adults from southern Switzerland. *Vaccine*, 8, 100108. <https://doi.org/10.1016/j.jvax.2021.100108>
- Forman, J., & Damschroder, L. (2008). Qualitative content analysis. In L. Jacoby & L. A. Siminoff (Eds.), *Advances in bioethics volume 11 empirical methods for bioethics: A primer* (pp. 39–62). Oxford.
- Gadamer, H.-G. (1989). *Truth and method*. Crossroad Publishing.
- Giubilini, A., Savulescu, J., & Wilkinson, D. (2020). COVID-19 vaccine: Vaccinate the young to protect the old? *Journal of Law and the Biosciences*, 7(1), lsa050. <https://doi.org/10.1093/jlb/lsa050>
- Gordon, J., Reynolds, M., & Barnby, E. (2021). An informative discussion for school nurses on COVID-19 mRNA vaccine. *NASN School Nurse*, 36(3), 132–136. <https://doi.org/10.1177/1942602X21999606>
- GOV.UK (2021). Coronavirus (COVID-19) in the UK: Deaths in the United Kingdom. <https://coronavirus.data.gov.uk/details/deaths>
- International Council of Nurses. (2021). Success of mass COVID-19 vaccination programmes will depend on frontline nurses and nurse leaders at the highest level of government. Retrieved from <https://www.icn.ch/news/success-mass-covid-19-vaccination-programmes-will-depend-frontline-nurses-and-nurse-leadersttp://www.icn.ch/news/success-mass-covid-19-vaccination-programmes-will-depend-frontline-nurses-and-nurse-leaders>
- Jones, M., & James, J. (2021). Role of the nurse in addressing vaccine hesitancy and misinformation on social media. *Nursing Standard*, 36, 62–66. <https://doi.org/10.7748/ns.2021.e11759>
- Kerr, J. R., Freeman, A. L. J., Marteau, T. M., & van der Linden, S. (2021). Effect of information about COVID-19 vaccine effectiveness and side effects on behavioural intentions: Two online experiments. *Vaccine*, 9, 379. <https://doi.org/10.3390/vaccines9040379>
- Kumar, D., Chandra, R., Mathur, M., Samdariya, S., & Kapoor, N. (2016). Vaccine hesitancy: Understanding better to address better. *Israel Journal of Health Policy Research*, 5, 2. <https://doi.org/10.1186/s13584-016-0062-y>
- Laverty, S. M. (2003). Hermeneutic phenomenology and phenomenology: A comparison of historical and methodological considerations. *International Journal of Qualitative Methods*, 2(3), 21–35. <https://doi.org/10.1177/160940690300200303>
- Lewandowsky, S., Cook, J., Schmid, P., Holford, D. L., Finn, A., Leask, J., Thomson, A., Lombardi, D., Al-Rawi, A. K., Amazeen, M. A., Anderson, E. C., Armaos, K. D., Betsch, C., Bruns, H. H. B., Ecker, U. K. H., Gavaruzzi, T., Hahn, U., Herzog, S., Juanchich, M., ... Vraga, E. K. (2021). The COVID-19 vaccine communication handbook. A practical guide for improving vaccine communication and fighting misinformation. Retrieved from: <https://sks.to/c19vax>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.

- Lindholt, M. F., Jørgensen, F., Bor, A., & Petersen, M. B. (2021). Public acceptance of COVID-19 vaccines: Cross-national evidence on levels and individual-level predictors using observational data. *BMJ Open*, 11, e048172. <https://doi.org/10.1136/bmjopen-2020-048172>
- MacDonald, N. E., & the Sage Working Group on Vaccine Hesitancy. (2015). Vaccine hesitancy: Definition, scope and determinants. *Vaccine*, 33, 4161–4164. <https://doi.org/10.1016/j.vaccine.2015.04.036>
- Marinaci, T., Venuleo, C., Gennaro, A., & Sammut, G. (2021). Making sense of the COVID-19 pandemic: A qualitative longitudinal study investigating the first and second wave in Italy. *Heliyon*, 7(9), e07891. <https://doi.org/10.1016/j.heliyon.2021.e07891>
- McSpadden, J. (2022). Vaccine hesitancy among older adults, with implications for COVID-19 vaccination and beyond. *AARP*. <https://doi.org/10.26419/ppi.00123.001>
- Murphy, J., Vallières, F., Bentall, R. P., Shevlin, M., McBride, O., Hartman, T. K., McKay, R., Bennett, K., Mason, L., Gibson-Miller, J., Levita, L., Martinez, A., Stocks, T. V. A., Karatzias, T., & Hyland, P. (2021). Psychological characteristics associated with COVID-19 vaccine hesitancy and resistance in Ireland and the United Kingdom. *Nature Communications*, 12(1), 29. <https://doi.org/10.1038/s41467-020-20226-9>
- National Health Service England. (2021). COVID-19 vaccination archive. <https://www.england.nhs.uk/statistics/statistical-work-areas/covid-19-vaccinations/covid-19-vaccinations-archive/>
- National Health Service England. (2022). COVID-19 data. <https://www.england.nhs.uk/statistics/statistical-work-areas/covid-19-vaccinations/>
- Njoku, A., Joseph, M., & Felix, R. (2021). Changing the narrative: Structural barriers and racial and ethnic inequities in COVID-19 vaccination. *International Journal of Environmental Research and Public Health*, 18, 9904. <https://doi.org/10.3390/ijerph18189904>
- Oduwole, E. O., Pienaar, E. D., Mahomed, H., & Wiysonge, C. S. (2019). Current tools available for investigating vaccine hesitancy: A scoping review protocol. *BMJ Open*, 9, e033245. <https://doi.org/10.1136/bmjopen-2019-033245>
- Office of National Statistics. (2021a). Coronavirus (COVID-19) latest insights: Deaths. <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/articles/coronaviruscovid19latestinsights/deaths#deaths-by-age>
- Office of National Statistics. (2021b). Estimates of the population for the UK, England and Wales, Scotland and Northern Ireland. <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland>
- Petravic, L., Arh, R., Gabrovec, T., Jazbec, L., Rupčič, N., Starešinič, N., Zorman, L., Pretnar, A., Srakar, A., Zwitter, M., & Slavec, A. (2021). Factors affecting attitudes towards COVID-19 vaccination: An online survey in Slovenia. *Vaccine*, 9, 247. <https://doi.org/10.3390/vaccines9030247>
- Powers, J. R., Goodger, B., & Byles, J. E. (2004). Assessment of the abbreviated Duke social support index in a cohort of older Australian women. *Australasian Journal of Ageing*, 23, 71–76. <https://doi.org/10.1111/j.1741-6612.2004.00008.x>
- Public Health England. (2016). Making every contact count (MECC): Consensus statement. <https://tinyurl.com/jvhye6pc>
- Razai, M. S., Osama, T., McKechnie, D. G. J., & Majeed, A. (2021). Covid-19 vaccine hesitancy among ethnic minority groups. *British Medical Journal*, 372, 1–2. <https://doi.org/10.1136/bmj.n513>
- Robertson, E., Reeve, K. S., Niedzwiedz, C. L., Moore, J., Blake, M., Green, M., Vittal Katikireddi, S., & Benzeval, M. J. (2021). Predictors of COVID-19 vaccine hesitancy in the UK household longitudinal study. *Brain, Behavior, and Immunity*, 94, 41–50. <https://doi.org/10.1016/j.bbi.2021.03.008>
- Royal Society for Public Health. (2020). New poll finds ethnic minority groups less likely to want COVID vaccine. Retrieved from <https://www.rsph.org.uk/about-us/news/new-poll-finds-bame-groups-less-likely-to-want-covid-vaccine.html>
- Russell, D. W. (1996). UCLA loneliness scale (version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment*, 66(1), 20–40. [https://doi.org/10.1207/s15327752jpa6601\\_2](https://doi.org/10.1207/s15327752jpa6601_2)
- Savoia, E., Piltch-Loeb, R., Goldberg, B., Miller-Idriss, C., Hughes, B., Montrond, A., Kayyem, J., & Testa, M. A. (2021). Predictors of COVID-19 vaccine hesitancy: Socio-demographics, co-morbidity, and past experience of racial discrimination. *Vaccine*, 9, 767. <https://doi.org/10.3390/vaccines9070767>
- Schwarzinger, M., Watson, V., Arwidson, P., Alla, F., & Luchini, S. (2021). COVID-19 vaccine hesitancy in a representative working-age population in France: A survey experiment based on vaccine characteristics. *The Lancet Public Health*, 6, e210–e221. [https://doi.org/10.1016/S2468-2667\(21\)00012-8](https://doi.org/10.1016/S2468-2667(21)00012-8)
- Tan, M., Straughan, P. T., & Cheong, G. (2022). Information trust and COVID-19 vaccine hesitancy amongst middle-aged and older adults in Singapore: A latent class analysis approach. *Social Science & Medicine*, 296, 114767. <https://doi.org/10.1016/j.socscimed.2022.114767>
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Qualitative Health Care*, 19, 349–357. <https://doi.org/10.1093/intqhc/mzm042>
- UK Government. (2021). UK COVID-19 vaccine uptake plan. Retrieved from <https://www.gov.uk/government/publications/covid-19-vaccination-uptake-plan/uk-covid-19-vaccine-uptake-plan>
- Wang, J., Lu, X., Lai, X., Lyu, Y., Zhang, H., Fenghuang, Y., Jing, R., Li, L., Yu, W., & Fang, H. (2021). The changing acceptance of COVID-19 vaccination in different epidemic phases in China: A longitudinal study. *Vaccine*, 9, 191. <https://doi.org/10.3390/vaccines9030191>
- Wang, Q., Yang, L., Jin, H., & Lin, L. (2021). Vaccination against COVID-19: A systematic review and meta-analysis of acceptability and its predictors. *Preventive Medicine*, 150, 106694. <https://doi.org/10.1016/j.ypmed.2021.106694>
- Worldometer. (2021). Coronavirus death toll. <https://www.worldometers.info/coronavirus/coronavirus-death-toll/>

## SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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