**Methodological paper**

Title: **Overcoming the challenges of recruiting and interviewing research participants following critical illness due to Covid-19.**

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**Abstract**

Background: During the strict restrictions of Covid-19 pandemic, recruitment and interviewing of participants in person was no longer possible and virtual methods were required. Virtual recruitment and interviews are not without their challenges, particularly when exploring sensitive topics.

Aim: To discuss how to overcome some of the challenges of recruiting and interviewing participants following critical illness due to covid-19.

Methods: An exploratory descriptive qualitative interview study with 20 survivors of Covid-19 critical illness discharged from two community-based healthcare settings in London, England. Participants were interviewed at home after being discharged from hospital after at least one month.

Findings: Due to the sensitivity of this research topic, adaptations to recruitment and interview strategies were needed, including involvement from Patient Experience Facilitators to increase recruitment. Considerations to interview strategies included use of virtual interviews and subsequent building of rapport with participants, coping with interruptions, managing distress of participants and self-care of the researchers.

Conclusion: Findings from this study will inform our recruitment and interview strategies in future studies with people who have been critically ill, despite relaxations of restrictions related to Covid-19.

Implications for practice: Our findings can be used to guide other qualitative researchers with challenges caused by the pandemic and the sensitive topic. The implications are that researchers can explore innovative ways to recruit participants via hospital/ community staff not usually involved in research. Virtual interviews require additional skills, such as building rapport with participants, and this may require additional training. A distress protocol for participants should always be considered when discussing sensitive topics. Self-care and de-brief strategies for the interviewers are also critical.

Keywords: Covid-19, recruitment, interviews, virtual interview, qualitative

**Introduction**

Interviews are a common method of data collection for qualitative studies. This paper discusses the challenges related to the use of virtual interviews for a qualitative study conducted during the Covid-19 pandemic (Bench et al, 2021). The aim of the overall study was to understand the experiences and rehabilitation needs of people who had Covid-19 and as a result were critically ill and needed respiratory support.

Virtual interviews are not a novel method used in qualitative research. However, our paper adds to the existing body of knowledge, identifying specific issues concerning recruitment and data collection when undertaking virtual interviews with participants after a critical illness due to Covid-19. The aim of this paper is to critically discuss these challenges and the steps we took to overcome them (Bench et al, 2021).

**Literature review**

The challenges of conducting research with people during Covid-19 are underexplored. Sy et al (2020) suggested that a small number of papers have been published, yet the literature on virtual qualitative research often evaluates the technology required for virtual interviews. For example Lobe et al (2020) reviewed the latest videoconferencing services, options for various platforms and applications including security issues and logistics.  Therefore there appears to be limited work that critically explores recruitment strategies and establishing rapport with participants (Sy et al 2020). The following review explores recruitment strategies and the ethical considerations this raises, practical issues around this research method, and the potential key learning points highlighted by our study.

Recruitment of participants to undertake virtual interviews can be beneficial because participants can be recruited from a wider geographical area. Conversely, researchers need to reflect on the impact of the digital divide, including inequality of access to the internet and/or devices (Archibald et al., 2019). This challenge can impact further on ethical considerations (Pocock et al, 2021), such as issues around differing privacy and data protection laws (compared with face-to-face interviews); increased under-representation of underserved groups; plus differing visual, verbal, and nonverbal cues which may result in distress not being easily picked up. As Salmons (2016) has highlighted, there are additional issues in virtual qualitative research that require attention, and some best practices from in-person research may not transfer.

Additionally Campbell (2021) highlighted how the national lockdown required their study group to change from intended face-to-face interviews to virtual interviews with participants who were lone parents. The author reflected on the impact of conducting interviews away from neutral venues, such as community centres and public cafes, to interviews undertaken via digital platforms. The researcher identified ‘a radical shift in interpersonal dynamics’ as both the participants and the researcher and participant were sometimes exposed to each other's homes and family situation, which they felt brought about ‘unexpected intimacy’ between researcher and participant.   
  
Practical issues highlighted during virtual interviews can include the potential for distractions when at home, potential confidentiality issues, internet issues, documentation of the consent process without hard signature and issues, such as collection of demographic data and participant payment, which were often conducted face-to-face (Schlegal et al, 2021).

Some of the concerns raised by previous study authors were evident in our study. Our paper additionally identifies key learning points focused on how to recruit, build rapport and mange interruptions during virtual interviews, and other special considerations, including managing distress.

**Methods**

Our exploratory study employed a qualitative methodology. We interviewed twenty people following discharge from hospital to find out how they were affected both emotionally and physically, and to explore the support required to become well again following Covid-19.

Ethical approval

Ethical approval was granted from the Health Research Authority (285898) and from the Health and Social Care Ethics Panel of London South Bank University (ETH1920-0176).

Participants provided written or audio-recorded informed consent prior to interview. Participants were able to terminate the interview at any time and withdraw from the study without giving a reason; however, following transcription, withdrawal of their data was not possible as their identifying details were removed (approximately 2 weeks after the interview).

Recruitment

Ensuring patients and staff are involved and well engaged is critical to successful recruitment and a truly successful co-design approach. We involved a specific team of ‘Patient Experience Facilitators’ (PEF). Because of the team’s experience in engaging with patients and staff on a daily basis, it was felt they would be well placed to assist in recruitment for this study. The PEFs identified potential participants within the hospital Trust who fitted the inclusion criteria of the study, and then contacted these participants to see if they wished to be involved. The Patient Experience team attended weekly research team meetings to discuss progress, and the targets for participant numbers. It was extremely helpful to meet together weekly, as it was a safe space to free think, share challenges and discuss new ways in which we could recruit during these challenging times. The backing received from senior management was important and very supportive. Once the PEFs identified potential participants who wished to be recruited onto the study, one of the two research assistants made contact with the potential participant to ensure they understood the study, and with consent, arranged a mutually suitable date for interview.

One of the challenges was finding participants that met the inclusion criteria across the Trust sites. The PEF team across multiple sites liaised with front line staff on a regular basis to identify patients who potentially may have met the inclusion criteria before they were discharged from community services. The potential participants were then approached by the PEFs to inform them about the study, answer questions and asked for their consent to be contacted by one of the two research assistants. Further into the study, the Discharge Co-ordinators were involved. The Discharge Co-ordinators and the triage team were able to notify the PEFs in identifying potential participants who met the inclusion criteria before the patient was discharged. The PEFs could then give out the participant information leaflet, and discuss the study with the patient at an appropriate time prior to discharge.

Clinical staff engagement was also more difficult whilst working virtually. The research team were very conscious that frontline staff were facing extreme pressures and subsequent burnout and fatigue. Therefore, it was key to promote the benefits and importance of the research, to ensure buy in. The PEFs met with services and frontline staff to ensure continuous dialogue about the study at all meetings and gain understanding of how to make the referral process as simple as possible. If staff came across any eligible patients, they provided them with the written information of the study, confirmed verbal consent to be contacted and then passed the patient details to the research group. This system worked well.

The Covid-19 pandemic has provided further evidence of health inequalities within the UK (Patients Association, 2020). A large proportion of participants in our study identified as White British and female. The group discussed the need for a diverse sample, particularly as national mortality rates were highest among the Black, Asian and minority ethnic (BAME) community at that time (Public Health England, 2020). There was some discussion about targeting recruitment at this cohort of the population, however, this was identified towards the end of the recruitment period, and therefore was not a major influencer in the recruitment plan. Ensuring that health disparities are considered early on and as a key element when planning recruitment could prevent unconscious bias.

Interviews

Most qualitative interviews traditionally are conducted face to face (Mealer and Jones, 2013) as this is seen to be the gold standard in qualitative research (Krouwel et al, 2019, McCoyd and Kerson, 2006), however due to the Covid-19 restrictions of social contact and travel, all interviews for our study were held either by using virtual platforms (Zoom, MS Teams) or telephone.

Interviews held by virtual platform are described as ‘virtual face-to-face’ and we opted for this mode as it was considered by the team to be the best available option. Participants were given the choice of technology they were most comfortable with. Providing technology choice for participants is important, specifically the impact of the digital divide, including issues around unequal access to virtual devices, tools, and internet connectivity (Sy et al, 2020).

Zoom was the preferred method by participants, as many of them were using this to socialise during lockdowns. This finding is supported by Archibald et al (2019), where the majority (69%) of their study participants preferred Zoom in comparison to telephone, face to face or other video platforms.

**Discussion**There are a number of issues that the research team reflected on when utilising virtual interviews for our study with participants who were recovering form critical illness. These include the importance of building rapport, managing interruptions, special considerations following critical illness, managing distress and self-care of researchers.

*Building rapport*

Developing rapport with a participant is key to a successful interview (Gerrish & Lathlean, 2015) and a crucial skill that determines the collection of quality data (Mitchell, 2015). Creating rapport can be more easily achieved in person and consideration is required for virtual research (Carter et al, 2021). From the start, researchers developed strategies to assist building rapport with the participant to enable them to feel comfortable in telling their story. An initial phone call was made to introduce themselves and arrange the interview. Time was given to answer any questions the participant might have, ensuring they understood the interview structure. Their choice of virtual platform and any special considerations required for their interview were also clarified. Pre-research briefings are seen as a good way to ensure participants know what to expect and are comfortable with the virtual technology (Carter et al, 2021). Despite concerns about the difficulty of building rapport with participants virtually, no issues were experienced by the researchers, a finding also reported by Archibald et al (2019). Overall participants were very happy to share their experience and for some it was therapeutic:

‘*It’s been really cathartic talking with you as another health professional. Thank you for listening and the kindness you showed me today, it will I know help me on my road to recovery*’ (P17).

Campbell (2021) identifies an unintended intimacy that can be created between the researcher and participants, creating a welcome opportunity to interact with others during periods of lockdown, such as those during Covid-19. In our study, researchers also found the initial phone call to participants important. Interviews commenced with small talk and asking participants if they were comfortable where they were sitting, including getting a beverage (tea or coffee). It was re-emphasised that they could stop the interview at any point to have a break.

Not all participants wanted to be seen during interviews and one participant chose not to display themselves on camera. The researcher chose to keep their own camera on for the duration of this interview, so that the participant could see they were being listened to, as the researcher’s body language and responsiveness can help develop a good interview relationship (Gerrish & Lathlean, 2015). Through using the Zoom video platform, verbal and non-verbal cues such as facial expression and gestures can still aid discussion and facilitate engagement (Archibald et al, 2019). For the participant that didn’t show themselves on camera, the researcher paid extra attention to their tone of voice, breathing and how they answered the question.

*Managing interruptions*

A suitable environment to conduct interviews is always important. Although participants may become distracted if interviews take place in someone’s personal or professional setting (Gerrish & Lathlean, 2015), these were the only options available due to Covid-19 pandemic. The interview room should be private, quiet and free from interruptions (Holloway & Galvin 2016), however this is more challenging to achieve virtually, from not only the researchers’ side, but also the participants. The researcher must be flexible, able to adapt to unpredictability, manage interruptions and comfort levels during the interview (Carter et al, 2021).

Participants were asked to choose an interview time that worked best for them and most likely to be free of interruptions. Some interviews were held during a period of national lockdown, and hence breach of privacy from other household members needed to be considered. One participant chose to be interviewed when they were working from their office, away from family so that they could feel comfortable discussing their recovery in private.

Interruptions during interviews included doorbells, phone calls, and in some instances by other family members. Internet quality can also be an issue as there must be a good quality connection and relatively high data usage to support the online video platforms (Carter et al, 2021). Technical issues posed a challenge due to internet stability and computer issues and researchers had to support participants in troubleshooting to find a solution. However, Archibald et al (2019) found that resolving technical issues between the researcher and participant could further facilitate building rapport.

Although Zoom has a recording functionality, an audio-only Dictaphone was used to record the interviews in our study, as recommended for sensitive research topics, as they offer better security (Carter et al, 2021). Participants were notified when the recording was commenced, and when it was switched off at the end. The Dictaphone’s microphone was placed by the computer’s speaker for optimal audio quality.

*Special considerations following critical illness*

All interviews took place once participants had been discharged from hospital at least a month, however, many were still recovering from the effects of being critically ill with Covid-19. It was important, therefore, to consider participants’ particular needs and health issues. All but one interview lasted no more than one hour. This was an attempt to avoid Zoom fatigue (Bailenson,2021). One participant required their interview to be broken into two parts due to a health issue. Although exceeding one hour the participant was given a long break between interview parts.

Special considerations were also required for a range of reasons related to participants’ Covid-19 recovery illustrated by one participant:

“Physically I feel weak sometimes and then even when I’m talking to you, I experience that in my breathing, I have difficulty even talking long, it affects my voice because I had the tracheostomy while I was in hospital.” (P10)

Fatigue is a well-recognised problem after Covid-19 and other causes of critical illness (Bench et al, 2021), which also affected the interview process: “*I just haven't got the energy…I don't feel like bothering to do anything and I'm such an active person. This drains me.”* (P20). One participant required a support person to attend the interview to assist them in answering questions, and the interview took place over two time periods, with an adequate break in the middle for them to rest. Some participants also chose a day when they did not have any other appointments planned, or requested a morning slot when they felt they were able to concentrate the best. However others requested a late morning interview due to suffering from insomnia: “*I don’t have nightmares as such often, but I have issues sleeping. The longest period I can sleep at night is about three hours.”* (P10).

*Managing Distress*

Researchers should develop clear strategies on how to support participants who become distressed during their virtual interviews (Carter, 2021). Researchers checked in with interviewees at regular intervals to see how they were feeling and whether they needed a break. Participants were also reminded that the interview could be paused or stopped at any point. The researcher assessed participants for verbal and non-verbal signs of distress during the interview e.g., crying, shaking, dissociating, or hyperventilating (Draucker et al, 2009). However, this was not as easy in the phone interview.

A distress protocol jointly developed by our clinical psychologist and our patient representative was produced to manage any distress that arose in the context of this research project, a recommendation supported by Carter et al (2021). If participants showed any signs of distress, the researcher would pause the interview, express empathy and concern for the participant and follow the protocol.   
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Supporting participants expressing strong emotions whilst reliving traumatic experiences such as Covid-19 was challenging for researchers. Examples of emotions expressed during interviews included intense crying and shaking. Due to the virtual nature of the interviews physical support was not possible and clear strategies were required. As per distress protocol, the interviewer paused the interview, provided empathy and concern and evaluated the participants’ emotional state. Questions were asked, for example ‘*How are you feeling right now, what can I do to help you right now, would you like to stop the interview*?’. This interview would only proceed if the participant stated they were happy to do so. Before closing each interview, interviewers ended with some light conversation, to find out how participants were feeling post interview, and whether they needed support. Participants were signposted for professional support if needed, and could consent for the clinical psychologist to contact them if they wanted further emotional support.   
  
An experienced Patient and Public Involvement (PPI) representative was involved throughout the research. Her expertise was invaluable to the research process in representing the patient’s voice, and contributed to participant information leaflet and helped develop the distress protocol. Involving patients and the public throughout the research study process can have a positive impact on the research by ensuring the research is relevant and appropriate, whilst enhancing the quality (Brett et al, 2012).

*Self-care*

Due to the sensitive nature of the interview topic, it was important that researchers also managed their own wellbeing (Woodby et al, 2011). Interviews on sensitive topics can be traumatic and it is important to consider support, either by colleagues or a professional counsellor where appropriate (Green and Thorogood, 2014). As interviews took place when Covid-19 restrictions were in place, participants had less support from their usual social networks, and this was recognised by the research team.

A range of strategies are recommended, including reflective journals, peer and supervisory support and maintaining a healthy lifestyle (McCallum et al, 2020). One of the researchers scheduled their daily walk following interviews, using the time to reflect on the interview and a way of managing their own wellbeing. A diary was also kept by both researchers to reflect and to review themes arising from the interviews. Researchers also scheduled their weekly virtual meeting following their interviews, a time to also ‘check in’ and debrief, as well as discuss the themes arising from their interviews.

**Implications for practice**

Our findings can be used to guide other qualitative researchers with challenges caused by the pandemic and the sensitive topic. The implications are that researchers can explore innovative ways to recruit participants via hospital/ community staff not usually involved in research. In our study, the involvement of the Patient Experience Facilitators was crucial and is a recommendation to support future recruitment. The PEFs were able to support front line staff to identify potential participants, creating a link between the participant and the researcher.

Virtual interviews require additional skills, such as building rapport with participants, and this may require additional training. Building rapport helps participants feel comfortable when sharing traumatic experience of their critical illness.

A distress protocol for participants should always be considered when discussing sensitive topics and were particularly important during the Covid-19 pandemic. Protocols such as ours enable a process to be followed in the event of the participant/researcher/transcriber having high levels of emotional distress due to the sensitive nature of the topic.

Self-care and de-brief strategies for the interviewers are also critical when working virtually during highly emotional, uncertain and unpredictable times such as during Covid-19.

Conclusion

Traditionally qualitative research involves recruiting participants and interviewing in person. However, the Covid-19 pandemic restrictions meant virtual methods had to be used to recruit and interview participants. This paper has identified some of the challenges associated with virtual methods and participants who have been critically ill, and offers solutions based on our experiences, to ensure rigour and is maintained.

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