Ann Allergy Asthma Immunol 000 (2023) 1–3

Contents lists available at ScienceDirect

Letters

Guidance to enhance participant validity during virtual qualitative interviews and focus groups

In food-allergy research, the need for patient voices is critical.[1] These voices are often heard through qualitative research, which involves using various methods to collect personal, descriptive narratives from individuals with lived experience.[2] Data collected during qualitative interviews and focus groups may be used in multiple ways, including hypothesis generation,[2] program evaluation,[2] and developing guidelines,[3] and in combination with quantitative data in mixed methods studies;[4] finally, it may be used to generate initial core outcomes during measurement development. Before the coronavirus disease 2019 pandemic, interviews and focus groups were largely conducted in person, wherein participants were often recruited from clinical sites and were much more likely to be from the population of interest for the given study, although practical barriers persisted.

As a result of the coronavirus disease 2019 pandemic,[5] data collection was acutely shifted to a virtual environment, for which there was no precedent. Elsewhere, lessons about remote data collection have been described, including the practical issues related to data quality.[6] In this letter, we provide our top tips for optimizing online participant recruitment and ensuring participant validity for virtual qualitative studies, and offer guidance in identifying red flags. The tips presented herein are intended specifically for recruitment beyond the allergy clinic, given the initial layer of validity that is inherent to recruiting participants from a clinical setting.

Patient organizations reach "prescreened" and engaged people who generally have interest in a particular condition, often because of lived experience. These organizations typically have wide reach, with some having national or international scope. Limitations of recruiting participants through patient organizations include many requests for participation in research, leading to potential participant fatigue or burden. Similarly, because patient advocacy is a component of health literacy, people engaged in patient organizations may have higher health literacy than that of a more general population[7] and thus may not represent the broader patient community.

In contrast, social media platforms reach heterogeneous populations. Social media platforms reach a nearly unlimited number of participants and may increase the number of expressions of interest (EOI) from potential participants. Condition-specific, closed social media groups on large platforms, such as Facebook, are often limited to people interested in and–or living with that disease. Entry to these groups may be granted by an administrator, to whom proof of identity or similar may be required before admittance. Platforms such as Twitter and Reddit are open to anyone, without proof of identification. In our experience, recruitment from these platforms inserts vulnerability into the recruitment process because EOI are often numerous but require considerable effort to verify eligibility.

Participation in research studies is often associated with an honorarium. Cases of multiple EOI from a single person or of a small group of individuals working together to obtain multiple honoraria have been identified. Researchers can check for red flags (Fig 1) by assessing metadata.[8] Participant metadata should only be collected with ethical approval.[9] Of note, bona fide participants may share electronic devices, and thus, participants should not be excluded on the basis of similar metadata alone.

Participant screening must be done carefully. Purposive selection is essential for the rigor of qualitative data.[2] Carefully crafted, open-ended questions informed by clinical and–or content expertise will enhance purposive selection. Red flags (Fig 1), such as nonsensical or implausible responses to the screening questions, may raise concerns that the participant does not meet the eligibility criteria.

We also offer tips to obtain consent and invitation to interview. The research team is encouraged to keep a record of to whom a consent form was sent. Returned consent forms should be cross-checked to this list, to ensure that the consent form was received directly from the intended recipient, rather than a third party. At the start of the interview, verification of digital signatures or verbal consent is encouraged.

A small group of interviewers should conduct interviews and focus groups. At the start of an interview, researchers are encouraged to restate the name, date, and purpose of the study and ask the participant to confirm that they meet these inclusion criteria.

Attentiveness to participants' answers can glean more insight. Participants with lived experience are the experts on their own perceptions of their condition and should be familiar with disease management. Participants who have misrepresented their condition may provide highly unusual or vague answers to basic questions. In addition, consistency can be assessed by asking similar questions at various points throughout the interview.

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Dr Knibb has received research funding from Aimmune, National Peanut Board, Novartis, and National Institute for Health Research, United Kingdom; and has received honoraria to give a conference presentation from DBV Technologies. Dr Knibb is the Chair of the Psychology Working Group of the British Society for Allergy and Clinical Immunology.
Ms Merrill and Mr Golding have no conflicts of interest to report.
Funding: This project is funded by an operating grant on COVID-19 vaccine confidence from the Canadian Institutes of Health Research.

https://doi.org/10.1016/j.anai.2023.01.005

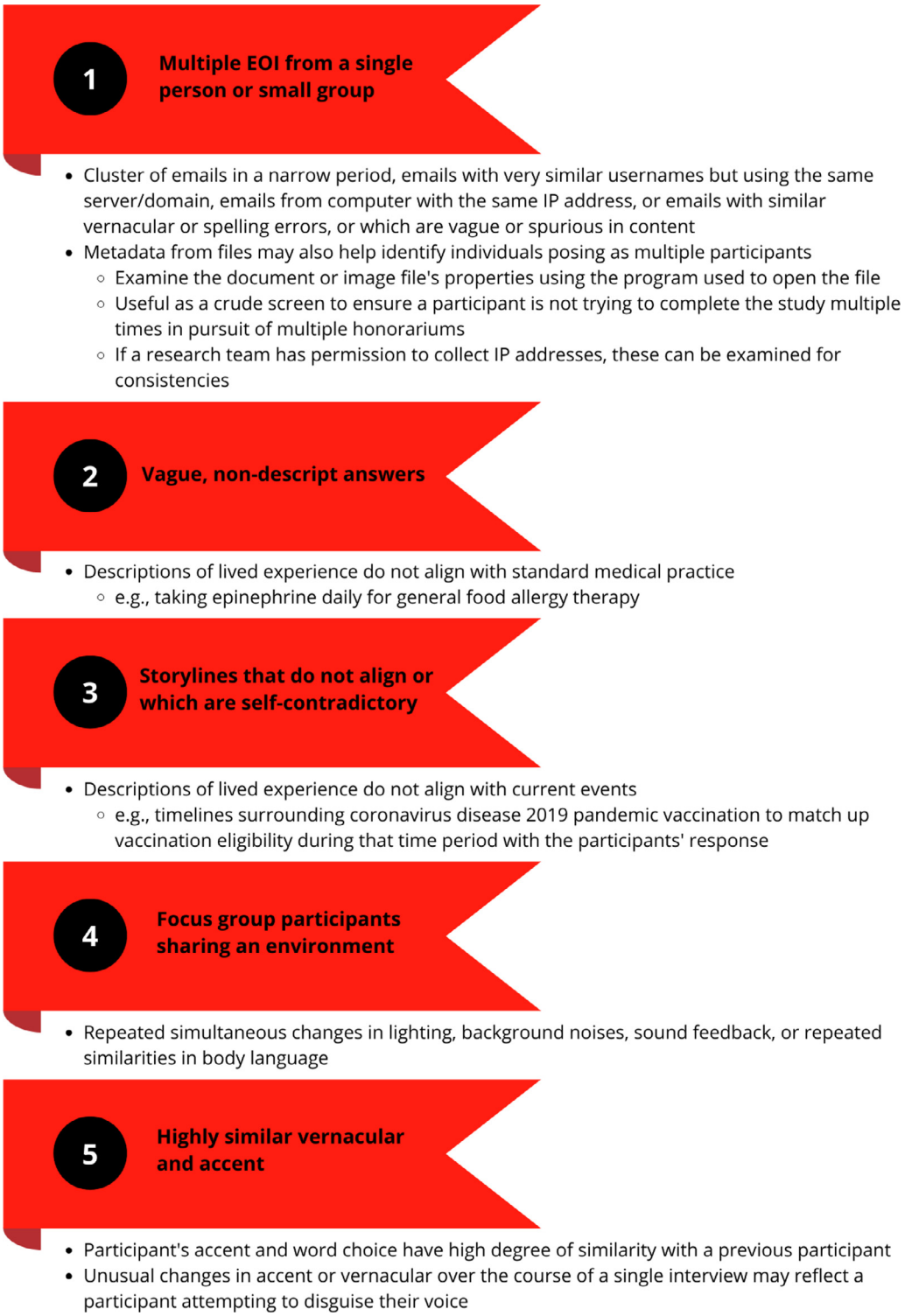

Figure 1. Red flags associated with virtual qualitative data collection, and tips on how to identify and address them. EOI, expression of interest; IP, Internet protocol.

Answers and storylines that do not align throughout the interview are red flags. Decisions on whether to provide an honorarium to participants who provide dubious examples is at the discretion of the research team, guided by their research ethics board-approved protocol.

We also note considerations unique to focus group. Ideally, 2 members of the research team will be present during a focus group. One team member will moderate the discussion. The other should pay attention to the virtual environment for red flags that participants are sharing the same environment.

Attention to vernacular and accent can be used as a screening tool to identify red flags. Voice-altering software is widely available and may alter accents or pitch, rendering sole reliance on these qualities inadequate. However, voice prints, the distinctive pattern of voice characteristics, are highly individualized and unlike fingerprints, also incorporate behavioral traits, including cadence, accent, and dialect.[10] During the interview, researchers should be mindful of these patterns that may indicate someone attempting to participate repeatedly.

Logging and excluding implausible answers may be a final way to identify participants who misrepresent themselves. Although

qualitative data analysis typically includes consideration of diverging or contradictory answers across a single interview,[2] consistently contradictory responses may be suggestive of a participant who has misrepresented themselves.

A detailed log of the interview or focus group date and time and of the specific concerns should be maintained and brought to the attention of the principal investigator. Every attempt should be made to consider alternative explanations. If reasonable doubt persists, these data should be excluded from the analysis.

In conclusion, the acute shift to virtual qualitative data collection has both facilitated and hindered the research process and data integrity. Most potential participants genuinely want to contribute to studies. However, some individuals may try to misrepresent their lived experience for financial gain. The tips presented in this article may be considered guidelines for researchers to ensure that the data collected, are, in fact, from bona fide participants.

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