NOTES FROM THE FIELD



Field Notes from the Border: Lessons Learned in Conducting Mental Health Research Involving Newly Arrived Latinx Immigrants as Study Participants

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Abstract

In this paper, we describe a research protocol for surveying and interviewing Latinx immigrants recently arrived at the US southern border, and we raise important and unique issues that need to be considered with this population. The main objective is to share experiences, challenges, opportunities, and essential considerations (which we call lessons learned) that researchers should take into account when working with this vulnerable study population. The six lessons learned focus on: (1) fostering relationships with community partners; (2) participant consent and compensation; (3) linguistic and cultural fluency of researchers; (4) adapting data collection procedures to the environment and conditions; (5) establishing trust with participants and being trustworthy; and (6) addressing the ethical considerations of research with immigrant populations and the positionality of researchers. This paper provides a unique perspective of working with a vulnerable population that is in transit, often coming from circumstances of danger and risk to their lives, who are now headed towards new and uncertain experiences that may include disadvantage, exclusion or other risks. The lessons learned from the field inform best practices for working with recently arrived Latinx immigrants, with implications for public health research that may extend to other immigrant populations.

Keywords Latinx immigrants · Mental health · Study protocol · Mixed-method research

Background

The Latinx population in the United States (US) has increased nearly nine-fold since the 1960s and is projected to grow to 107 million by 2065 [1, 2]. Recent trends in human migration show that forced displacement (i.e., an

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involuntary or coerced movement of individuals away from their home region due to persecution, conflict, generalized violence or human rights violations) is the dominant cause of migration of individuals from Latin American countries to the US [3]. Families including women and children account for a growing share of immigrant apprehensions by Customs and Border Protection (CBP), as opposed to individual adults who were historically working age men looking for economic opportunity [4]. This shift in immigrant demographics may indicate the increasing direness of the political and societal conditions in Latin American countries [5, 6] and also emphasizes the importance of understanding trauma experiences and mental health risk in this growing population. Furthermore, Latinx immigrants are a vulnerable population due to the stressors and traumas endured in their home country and along their migration journey, and the social, cultural, and legal difficulties they face once they arrive in the US [3]. Therefore, to study mental health and other health issues in this population, researchers should



consider the specific context and unique circumstances of Latinx immigrants in the US.

Previous research has offered guidance for conducting research with vulnerable populations such as Latinx immigrants in the US. Key considerations include fostering partnerships with community organizations that form a bridge between the research team and the study participants, developing trauma-informed research protocols, and linguistic and cultural fluency [7, 8]. Trauma-informed protocols emphasize transparency about study objectives and processes, center the autonomy and expertise of the participants, and clearly communicate that sensitive information like immigration status is strictly confidential. These approaches, especially the centering of participant autonomy, also help ensure that vulnerable populations are not "overprotected" and unnecessarily sheltered from research that may benefit them while concurrently recognizing their unique circumstances [9, 10].

However, "best practices" for research with vulnerable Latinx immigrant populations have largely been informed by studies of members of established Latinx communities who have been in residence in the US for some time [7, 8]. Relatively little literature has focused specifically on Latinx immigrants who have recently arrived in the US and have not yet reached their final destination within the country. Recently-arrived Latinx immigrants represent a uniquely vulnerable subgroup within the broader Latinx immigrant population. This population is diverse in many ways, including culture, language, and geography. Newlyarrived immigrants are still grappling with the fresh stressors and traumas from their migration journey [11, 12] while beginning the challenging process of navigating social, cultural, and legal barriers in the U.S. Additionally, recent Latinx immigrants who are not seeking asylum are difficult to locate, requiring unique collaborations with organizations that provide humanitarian aid or immigrant services to access this study population. Ethical concerns such as privacy and security with regards to immigration status is also paramount, requiring additional research considerations about participant compensation and autonomy to make their own decisions about participation in research. Thus, this paper describes a research protocol in the process of enrolling 700 Latinx adult immigrants recently arrived at the US southern border. As of September 2023, we enrolled 336 participants and report on the lessons learned thus far.

Methods

Study Team

The study team included interdisciplinary experts in the fields of mental health, trauma/stress and its effects on health, migration and policy, bioethics, humanitarian work, qualitative and mixed methods, as well as quantitative biostatistical methods. The interdisciplinary nature of our research team enhanced our ability to ask questions informed by diverse disciplines and methodological perspectives. It also allowed us to effectively adapt, or course correct as needed throughout the research process. Importantly, the PI of this study (LXV) is a bi-cultural (Mexican/American) and trilingual (Spanish/Portuguese/English) researcher with lived and professional policy experience in Mexico and Brazil. This positionality afforded the PI the opportunity to study mental health that is informed by LXV's training in Social Work, Social Policy, and expertise in the Latin American region.

Participants

Immigrants who have arrived at the US/Mexico border from Latin American countries within the past 14 days have been and will continue to be recruited into the study. Eligible immigrants are at least 18 years of age, Spanish-speaking or English-speaking, and capable of giving informed consent. To obtain sex and gender perspectives, at least half of our sample size consists of women or gender-diverse people. Individuals who are conversant only in non-Spanish indigenous languages or other regional dialects (i.e., unable to converse in basic Spanish or English) are excluded. Participants consist mostly of asylum-seeking individuals who are in transit to a host destination in the US (current migration policies make the recruitment of immigrants not seeking asylum unfeasible).

Recruitment

Trained study personnel approach potential participants for recruitment after the immigrants obtained basic personal necessities, made travel arrangements, and had at least 2 h of wait time prior to further travel. Briefly, study personnel explain the study protocol to potential participants, screen those interested, and obtain verbal consent from those eligible to participate. Participants are informed that participation is voluntary and that they may withdraw at any given point of the study per our approved human subjects' protocol (Colorado Multiple Institutional Review Board (COMIRB) Protocol 21-4175).



The recruitment and consenting processes take place in the waiting area of a humanitarian respite center located at the US southern border, which is a large open hall where immigrants await departure to the bus terminal or airport for further travel. Due to physical and logistical limitations of the waiting area, participants are surveyed or interviewed in a far corner of the larger hall where a table and chairs are set aside for this study to achieve relative privacy. Children traveling with study participants are provided with age-appropriate entertainment on a tablet computer or drawing books. Children are given the option to either stay with their parent/guardian or remain close-by while the respective participants complete their survey or interview. Following consent, data for this study are collected by the PI (LXV) and a volunteer trained research assistant.

Study Approach and Topics of Interest

The ongoing research reported here uses a mixed-methods approach applying both quantitative and qualitative data collection, using qualitative data to validate and improve quantitative data and collection in our validation sample. For the quantitative survey the study goal is to recruit an initial sample of 320 participants and a second, validation sample of 320 participants, a total of 640 participants in surveys. Currently, we have collected 320 surveys and 16 qualitative interviews. Some of the people approached are interested in participating but prefer not to take part in the quantitative, we offer the alternative of participating through a qualitative interview in which we ask open questions about similar topics as the survey (target number of participants for the qualitative portion is approximately 30). This research is focused on mental health and trauma exposure, including symptoms of anxiety, depression, and post-traumatic stress disorder (PTSD). Thus, we obtained basic demographic profile and information about participants' migration journeys, including data on various traumatic experiences and exposure to discrimination (both as direct and witnessed). However, since the focus of this paper is on describing field research experiences and the lessons learned, we do not include a detailed explanation of the measures and analysis.

We developed our lessons learned through an iterative discussion within our interdisciplinary research team, focusing on our field research process and how our experiences could benefit other researchers interested in similar topics or populations. We discussed how we addressed various aspects and challenges of the research, including participant recruitment, conducting studies in less-than-ideal settings, ethical considerations for newly-arrived vulnerable populations in the US, and incorporating engagement strategies that amplify the voices of Latinx immigrants while meeting the study's goals.

Results

Participants in this ongoing study are originally from 14 different countries in North America (Mexico), Central America (El Salvador, Guatemala, Honduras, Nicaragua, Panama), South America (Bolivia, Colombia, Ecuador, Peru, Venezuela) and the Caribbean (Cuba, Dominican Republic, Haiti). Their age range is between 18 and 61 years, with approximately two-thirds identify as female. So far, we have approached 397 Latinx immigrant adults 18 years or older of whom 336 enrolled in our study to date (enrollment rate: 84.6%). Several potential participants whom we have approached preferred not to participate for different reasons (e.g., they were not interested, tired, preferred not to say, or did not have the time). Although this paper does not aim to provide a detailed description of the study participants, it is important to note that most had experienced various forms of trauma. However, they also demonstrated significant strengths, such as strong faith and family bonds, and maintained a positive outlook on life for themselves and their families.

We anticipate that the data collection process at the study site will be concluded by the end of year 2025 and analysis will continue into 2026 or 2027. Throughout the research process, we continually examined our field work practices and conduct, especially considering that the study site is a respite center. This allowed us to extract valuable lessons, while ensuring that we followed best practices that affords respect to study participants but could also benefit our team and other investigators. We carefully examined our fieldwork practices while working in this respite facility and throughout this research to extract lessons learned and ensure we adhere to best practices that are of value to our team and other investigators. We present here the six lessons learned from conducting this field research, which are illustrated in Fig. 1.

Lesson 1: The Importance of Fostering Relationships with Community Partners

Prior to the start of this research, the PI had established a relationship of trust for many years with our community partners (i.e., respite center leadership, staff, volunteers, law enforcement). Prior research efforts highlight the importance of developing strong relationships with community partners to improve recruitment efforts [10]. In our research, we do not involve respite center personnel in recruitment efforts, but they still support the research efforts by allowing us to recruit and enroll participants on-site. We believe that fostering relationships with community partners is the central foundation of all other lessons presented below. Important in fostering relationships is the researcher's ability to



Fig. 1 Lessons learned from conducting research with newly arrived immigrants from Latin America



convey to partners over time: (1) a commitment to a long-term collaboration; (2) the importance of conducting this work and highlighting the fact that without community partners, this type of research is impossible; (3) a sense of good-will in supporting the community partner's mission to best serve and protect the interests of the study population; and (4) dissemination of results back to community partners to help in their efforts (e.g., program improvement, advocacy work, fundraising). For example, the PI (LXV) was a volunteer with the respite center years before the research collaboration began and is also a part of that border community in the area through family ties and has lived there in the past.

Part of building a relationship of trust with community partners is understanding that community organizations have different priorities than an academic partner engaged in research. It is important for researchers to have a consistent presence in the community and be supportive of broader community efforts, regardless of whether there is a working relationship with an organization or not. For example, the PI has strengthened the relationship with the organization by volunteering with the organization, maintaining both verbal and written communication with staff and leadership, asking for input on study design questions, and amplifying whenever possible the importance of the humanitarian work that our community partners do for migrant populations.

Lesson 2: Participant Consent and Compensation

An important part of working with vulnerable populations is that we make every effort to include them in research studies despite their vulnerability, especially in studies that may benefit them [9]. These efforts include articulating specific ways in which we can facilitate the process of inclusion in the institutional review board (IRB) process. An example from this research comes from our request and approval by the IRB to obtain verbal consent for study participation, as has been done with previous studies conducting research on sensitive topics or with vulnerable/difficult to reach populations [11–13]. For this study, obtaining verbal consent for participation was important because written consent may have dissuaded potential participants from engaging in this research for fear of any legal consequences that might come their way or how their names might be used for purposes beyond the research. Although we make it abundantly clear that their voluntary participation in this research is unrelated to legal or migration processes, doubts may linger in potential participants' minds if we ask for written consent. Thus, we believe that use of verbal consent is consistent with our study approach of maintaining anonymity and confidentiality of our participants.

From a research ethics perspective, working with victimized and vulnerable populations mandates ethical considerations, including respect for persons, informed consent, promoting well-being, and understanding the culture and context that shapes their unique experiences [14]. These considerations are central to the research methods proposed. For example, we realize that individuals and families often arrive with little to nothing yet are willing to share their experiences. Therefore, out of respect for their time and effort, we felt it was appropriate to provide participants with a prepaid \$50 gift card to a major retailer because they can use it to purchase needed supplies. This follows the guidance of



Dickert and Grady on paying participants a nominal amount out of respect for their time and contribution to the research [14, 15]. In addition, in consultation with local experts and with consideration of the approximate time of 45 to 60 min that it takes to complete a survey, this amount was perceived as respectful and would not create an undue pressure to participate in the research. We documented gift card distribution by asking participants to acknowledge receipt of the gift card. To maintain anonymity, participants we asked to write down two or three initials to confirm receipt on a preprinted reimbursement tracking spreadsheet that included their assigned participant number and the last four digits of the gift card. This method of documentation was deemed to meet research regulatory compliance, while concurrently recognizing the challenges of the nature of the study.

Finally, we considered providing a prepaid debit card as opposed to a gift card, but ultimately found that the population might be vulnerable in two ways: (1) although not necessary, some merchants may ask participants to provide official identification when using a prepaid debit card, which might present a problematic scenario for immigrants who are seeking asylum; and (2) while the flexibility of a prepaid debit card was desirable, we found that fees charged by prepaid debit card providers could be considered predatory (e.g., a fee per transaction regardless of amount, monthly fees on the debit cards, etc.) for a vulnerable population. We also discovered that several prepaid debit card companies charge an upfront activation fee to eliminate transaction fees on future purchases. However, these fees can accumulate and place a financial burden on the research budget.

Lesson 3: Linguistic and Cultural Fluency of Researcher(s)

The ability of the researcher to speak the language (i.e., Spanish) fluently and in a manner that inspires trust and familiarity for participants is essential. The PI (LXV) conducting interviews for this study is fully bi-culturally Mexican and American. Bi-culturally Mexican and American means living in both countries and being a part of both cultures, knowing the expressions commonly used in the two different societies, and using language and cultural expressions that the researcher understands are familiar for both them and participants [8]. The PI has lived and/or worked in several countries of Latin America and the world, and thus understands and can convey many of the fundamental values common to a very diverse Latinx culture in research. For example, in Spanish, using "usted" or "tu" to address participants means the same in English: "you". However, using the formal "usted" in conversation conveys respect for participants because the researcher does not personally know

the participants, and sets the tone of conversation as one where the researcher is there to learn from the participants.

Fluency in the language is essential, but so is understanding body language, cultural expressions, and abiding by the accepted cultural norms. For example, when approaching potential older adult participants, it is essential to address them respectfully (both with language and expressions of deference) and ask them to share their wisdom and experience. In many Latinx cultures, the titles "Doña" and "Don" (roughly equivalent to "Madam" or "Sir") are often used to address elders or respected individuals who are seen as bearers of experience and wisdom. Sometimes we addressed participants in this manner as a sign of respect. In our study, we view these participants as key sources of insight, and we strive to reflect that respect and value in our language choices. Another example is when interviewing pregnant women, it is important for researcher to take time to ask how they feel physically and emotionally about their pregnancy and to learn about their hopes for their baby. These cultural elements are crucial for building a connection and establishing a meaningful relationship before and during the interview process.

Bi-lingual and bi-cultural researchers are uniquely positioned to understand the cultural norms and practices of Latinx immigrants and have an improved ability to conduct rigorous research that is both culturally nuanced and ethical [16]. Our study participants came from over a dozen different countries, so it is understandable that we could not be fully aware of every cultural nuance across such a diverse range of backgrounds within the Latinx community. Thus, our approach was to meet participants where they were in terms of the experiences they have had and the journey they are on. We strive to do this with as much respect, deference, and dignity as possible. This would have been difficult to achieve without a research team fluent in the language and equipped with the cultural understanding necessary to address participants' questions and concerns effectively.

Understanding language limitations is just as important as fluency. For example, although we encountered participants from Haiti who had lived several years in other Latin American countries and spoke Spanish, using structured survey questions in Spanish with these participants proved to be a challenge and some words may have been lost in translation. Another similar example comes from working with participants who come from a Spanish speaking country (e.g. Guatemala) but whose first language is not Spanish but an indigenous language. Sometimes structured surveys can be challenging and conducting qualitative interviews could be a more appropriate option. This became an important lesson for us because while we would like to capture as many different experiences as possible within the study population, we acknowledge that not everyone will have the



same language abilities (regardless if they are from the same region of the world). Thus, we accept this condition as part of the limitation of the research experience and data collection process.

Lesson 4: Adaptation of the Research to the Site Circumstances and Participant Needs

Researchers must learn to adapt their protocols to prioritize participant protection and engagement when conducting research in the community and in spaces that belong to community partners. In this study, we developed a protocol to protect the anonymity of participant responses in our database by not retaining any personal identifiers. While drafting the initial research protocol, we also assumed ideal physical conditions for conducting the research, but this was not so when the researcher arrived at the study site. The study site turned out to be a large open space where people slept, ate, waited, walked around, received vaccinations, and children played. Ideally, interviews would be conducted in a private area, but the only available option was a corner of the space that was not used for sleeping or waiting for their departure. Furthermore, the culture of the community space is that of a shared space welcoming to everyone. As a shared open space, there is noise from other people talking on the phone, the loudspeaker making announcements, people constantly in movement, or kids running around playing. While not ideal, the small corner in the community space was the most private part of the study site. Although complete confidentiality in this environment cannot be guaranteed (e.g., other people in the respite center can see who is being interviewed), individuals nevertheless willingly participate and share information about their experiences. Most individuals in the respite center are highly focused on their future travel plans and rarely pay any attention to the research interviews of other participants.

Lesson 5: Establishing Trust with Potential Research Participants and Striving to be Trustworthy

Demonstrating honesty and goodwill in approaching participants is another central aspect of conducting ethical research. First, how researchers approach participants matters in building trust. In line with IRB ethical standards, we clearly explain that participation is voluntary and does not affect the services they receive at the respite center in any way. Second, we conduct the study within a larger context in collaboration with community partners, whose mission is to provide a safe space for immigrants. Our relationships with our community partners also communicate to potential research participants that we share common values of advancing the welfare of this population alongside our

community partners [17]. Third, researchers are perceived as more trustworthy when they are allowed to step outside of a seemingly distanced and sterile approach and interact with participants in a warm, caring, and respectful manner as humanity requires.

In creating an environment that can foster participant trust, we used the following strategies: (1) conveying in simple and direct language the nature of the research study and the reason why the knowledge generated will be valuable to improve clinical and research outcomes for this population; (2) clarifying to participants that we are not reporters who will be sharing the data as media pieces. Instead, we are researchers dedicated to generating knowledge by understanding a cumulative sum of individual experiences, rather than documenting specific, identifiable events; (3) approaching participants by asking if they are willing to share their expertise and experience, while listening with respect for their culture and retelling of past events; and (4) showing empathy and compassion throughout the research process. This means allowing study participants time to reflect and think about whether they would like to participate or to just give them a moment to regroup or reassess their continued participation during a difficult moment in the interview.

Many participants, after taking part in the study, mentioned that they "felt better" or that they "had never spoken about these things before" in a way that they felt was helpful for them [18]. In some ways, participating in the study was cathartic, as other researchers have also noted [9]. Some participants also expressed gratitude for having a space to share their journey and feelings about their experiences, and many expressed hopes that their experiences would help other immigrants to the US in the future. For others, their study participation provided an opportunity to stop and reflect on their journey experiences in a way they had not done before.

Many participants also had questions about the researcher at the end of the study. For example, LXV answered questions about her upbringing in Mexico, her education and training, her current job in the US, whether she was married or had children, where the state of Colorado is located, and so forth. Perhaps participants asked these questions because they wanted to know more about the person with whom they had shared so much about their own lives. We believe that being true and transparent in our interactions with participants was critical to building trust and was perhaps a way to minimize the challenges of conducting this research. Necessary boundaries exist in research between the researcher and their participants to minimize power dynamics, and researchers are often encouraged to avoid sharing personal information and introduce potential biases. However, we have found that discussing one's personal and professional life on basic questions (e.g., years as a researcher,



education and upbringing) does not cross ethical boundaries nor introduce biases. Instead, being open and relatable as a researcher provides participants with a sense of comfort and confidence in sharing their innermost thoughts in a new and uncertain situation, thus facilitating the research process and ethics.

Lesson 6: Ethical Considerations when Working with Vulnerable Immigrant Populations

Research with vulnerable immigrant populations requires study designs that ensure scientific rigor and ethical integrity to produce valuable and valid knowledge beneficial to all [19]. Key elements for consideration include the population's context, culture, and life history [19, 20] as well as recognition of within-group diversity [16, 19, 20] and ethical representation of findings focused on understanding the unique needs of the population and improving their wellbeing [16]. There is often the ethical question of whether to interview Latinx immigrants during a transitory and likely stressful period in their lives. However, respect for persons requires that we listen to views from those living through this experience and that all individuals have the opportunity to participate in research [21]. Although researching recent Latinx immigrants poses various challenges, not studying this population means we miss the opportunity to build the evidence needed to enhance their health and well-being and address their short- and long-term needs. Listening to the experiences of those who are living as recent Latinx immigrants in the US provides valuable insights that deepen our understanding [19].

Finally, as researchers, we should recognize our positionality, which sometimes presents conflicts of interest or biases. Advancement in academic careers often requires publications and grant funding, and thus researchers may benefit personally from the research products. In this research, LXV's simultaneous positionality as a researcher at a US university and a member of the Latinx community who grew up in Latin America is important when considering many aspects of the research, ranging from defining the research questions to setting the tone of interaction with participants. Moreover, LXV has worked in as a clinician with immigrant youth traveling alone and refugees from Latin America and other parts of the world. Such positionality conflicts must be recognized and acknowledged to mitigate any biases in working with vulnerable populations.

Researchers with academic titles may prompt a perceived imbalance in authority and garner fear, which must be recognized and managed. For example, when conducting interviews, LXV considers wording of introductions carefully and dresses in a casual manner when doing fieldwork. For example, "Hola, cómo esta? Mucho gusto en saludarle. De donde viene? Bienvenida/o! Yo me llamo Laura Vargas y soy investigadora y doctora enfocada en temas de salud mental de la comunidad migrante..." (Hello, how are you? It's a pleasure to meet you. Where are you coming from? Welcome! My name is Laura Vargas and I'm a researcher and doctor focused on mental health issues of the migrant community...).

In introductions, the researcher highlights that the central aim of the study is to learn from participants, emphasizing that their expertise is vital to conducting this research, which bears the ultimate goal of helping to improve immigrant mental health. For example, "El propósito de nuestra investigación es aprender directamente de usted y otras personas migrantes sobre sus experiencias, los retos que enfrentan en temas de salud mental v las adversidades o experiencias traumaticas que haya vivido antes o durante el viaje. Nuestro objetivo principal es entender mas sobre los retos de salud mental que enfrentan las personas migrantes que van llegando a Estados Unidos, y mejorar la atención y servicios de salud para la comunidad immigrante." (The purpose of our research is to learn directly from experience and that of other migrant persons about the mental health challenges as well as adversities or traumatic experiences you may have had before or during the journey. Our main objective is to understand more about the mental health challenges faced by migrant people arriving to the United States, and improve health services and care for the immigrant community). We use the words migrant and immigrant purposefully in Spanish because (1) participants mostly refer to themselves as migrants; and (2) in Spanish, the word migrant is used for persons who are still in transit to somewhere else and immigrant is used for people/communities that are established in a receiving country.

We should do our best to advance science by protecting the best interests of a vulnerable (often suffering) population and be mindful that participants trust us with their life stories and may express sensitive and morally distressing experiences. Balancing and managing competing interests of academic advancement and knowledge generation is an ongoing task, of which these lessons learned are an important part [17].

Discussion

This study offers key lessons learned from the field when conducting research with immigrants from Latin America who just arrived in the US and experiencing an unfamiliar setting and situation. The lessons that we have learned add to the evidence base of best practices when conducting research with vulnerable populations in an ongoing migration journey (see Fig. 1). Our study highlights the



importance of collaboration with community partners, adding to the existent literature the notion that developing trust with participants is connected to building trust with the broader community partners involved in their care. Further, our study considers the ethical questions that arise when engaging an understudied research population that has recently arrived in the US with little to nothing, emphasizing the need for participant-centered research that respects and values the contributions this population brings to US researchers. This research also highlights the importance of providing ethical and appropriate compensation when working with immigrant populations. This involves considering not only what is practical for researchers but also what is fair and respectful of participants' time and effort.

The challenges and opportunities that come from doing research with an immigrant population that is in transit are many. Indeed, there are logistical, ethical, and power relationship questions that must be revisited constantly. To date, our research experience has taught us that the challenges of conducting this type of work continue to evolve and remain ongoing. Importantly, we also can learn from our study participants' experiences. We respect their ability to exhibit moral courage and resolve on a daily basis in the face of new and uncertain challenges and circumstances that they face as immigrants to a new country.

This study has important implications for the study of mental health of immigrant populations for its insights on creating safe and ethical environments for participants to freely decide if they want to share their experiences for research purposes. This work emphasizes the role of researchers and their teams as ethical agents in the research process. They are responsible for building trust with participants and ensuring the process is perceived as trustworthy. These ethical and practical considerations advance the science to better understand the significant concerns of vulnerable immigrant populations that can improve their care and well-being so they can flourish during a most stressful and uncertain time in their lives.

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Declarations

Ethical Approval This study was approved by the Colorado Multiple Institutional Review Board (COMIRB; Protocol 21-4175). All procedures performed in this study involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This work did not involve any animal models.

Conflict of Interest All authors declare no actual or potential conflicts of interest. Authors declare no financial or non-financial interests that are directly or indirectly related to the work submitted for publication

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