Language justice as an antiracism institutional transformation: Institutional facilitators and barriers for community-engaged cardiometabolic health promotion research

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Abstract

This article describes lessons learned from the incorporation of language justice as an antiracism praxis for an academic Center addressing cardiometabolic inequities. Drawing from a thematic analysis of notes and discussions from the Center's community engagement core, we present lessons learned from three examples of language justice: inclusion of bilingual team members, community mini-grants, and centering community in community-academic meetings. Facilitating strategies included preparing and reviewing materials in advance for interpretation/translation, live simultaneous interpretation for bilingual spaces, and in-language documents. Barriers included: time commitment and expenses, slow organizational shifts to collectively practice language justice, and institutional-level administrative hurdles beyond the community engagement core's influence. Strengthening language justice means integrating language justice institutionally and into all research processes; dedicating time and processes to learn about and practice language justice; equitably funding language justice within research budgets; equitably engaging bilingual, bicultural staff and language justice practitioners; and creating processes for language justice in written and oral research and collaborative activities. Language justice is not optional and necessitates buy-in, leadership, and support of community engagement cores, Center leadership, university administrators, and funders. We discuss implications for systems and policy change to advance language justice in research to promote health equity.

Introduction

In 2021, the Centers for Disease Control and Prevention officially recognized racism as a public health issue, calling for "confront[ing] the systems and policies that have resulted in intergenerational injustice and given rise to racial and ethnic health inequities [1]." Linguistic exclusion, or restricted inclusion and access to information, services (e.g., healthcare providers), and resources based on language, contributes to persistent health inequities affecting communities of color and immigrant communities [2–5]. The COVID-19 pandemic exposed the impact of linguistic exclusion in access to COVID-19 information, testing, and vaccines [6]. Linguistic exclusion continues to be a powerful and persistent way in which institutions perpetuate racial inequities for linguistically marginalized communities. Furthermore, language and culture are interconnected, so culturally appropriate support requires linguistic support. This article is grounded in an understanding that a diversity of languages and lexicons spoken across populations, regions, and neighborhoods is a strength. This article aims to establish a framework for incorporating language justice into community-engaged public health and health services research, drawing on the experience of an academic Center focused on addressing

inequities in cardiometabolic conditions. The following sections outline the importance of integrating antiracism, language justice, and community-based participatory research (CBPR) approaches.

Antiracism

Racialization processes and linguistic exclusion go hand-in-hand. Society-at-large uses racialization processes to construct and reconstruct racial categories, meanings, and differences to justify unequal social statuses within racial hierarchies [7–9]. Racialization processes often involve policy and institutional practices [7–9]. In the United States (US), racial inequities in social, economic, and health outcomes derive from societal, institutional, and cultural systems rooted in white supremacist and capitalistic foundations designed to construct and assert privilege to those racialized as white and to justify the exclusion and/or exploitation of those socially constructed as nonwhite (e.g., Black, Indigenous, and people of color) [7–9].

The establishment and growth of the US as a formal nation state involved several interconnected racialization processes. This includes, for example, the enslavement and genocide of Indigenous peoples, and accordingly myriad Indigenous knowledge, practices, and languages [10]. Additionally, African peoples experienced their forced removal and subsequent loss of their mother tongues and connection to their homelands as they were forced to build the bedrock of the emerging American economy and were grouped together across languages to intentionally stymie communication and reduce the possibility of escape and revolt [11–13]. Moreover, the conquest of territories in which Indigenous and mestizo Latiné (a gender-neutral term to refer to people of Latin American origin or descent) peoples have called home for generations (e.g., regions now known as parts of Texas, California, and Puerto Rico) has contributed to their contested and/or second-class citizenship and loss of the diaspora's connection to their native tongues [7,14]. Similarly, the kingdom of Hawai'i was overthrown and illegally annexed by the US as a strategic military location and fertile land for sugar plantations; immigrant labor was imported and exploited from several other countries to suppress wages and prevent laborer revolt [15]. The collective displacement of Native Hawaiians nearly erased "Ōlelo Hawai"i, their native tongue, still considered a critically endangered language [16].

These racialization processes are not historical artifacts; their influence on linguistic exclusion and language justice endures today. The fact that as a nation, we in the US take for granted English as the dominant language ignores these historical efforts to destroy native languages. The US does not have an official language, but there is a long history of racial injustice in stripping communities of their native languages through boarding schools designed to assimilate Indigenous children, English-only public school mandates, and punishments for speaking native languages or Black English lexicons instead of "proper" English [13,17–19]. Providing conditions for in-language communication would ensure clarity and full participation for communities who have experienced restricted access to their native languages through racialization processes described above, and also for supporting limited English proficient communities who have more recently migrated and/or experience linguistic isolation.

Racialization processes are dynamic across place and time, so research to address racial health inequities requires an antiracism framework. Our approach heeds calls for scholarship that moves away from simply studying racism and its implications towards practicing antiracism and seeking antiracist transformations of institutional-level factors linked with racial injustices [20–22]. Antiracism is grounded in critical reflections on positionalities and local socio-political contexts to appropriately address health inequities [23]. Colorblind or race-neutral efforts by institutions or institutional actors are not grounded in antiracism and accordingly stand to maintain the status quo [24]. Antiracism efforts include those who are directly affected by racism, those who benefit from racial privilege, and institutional actors who can help effect systems-level change. Language justice must be supported by those who directly benefit, as well as those willing to engage in critical self-reflection to leverage power structures for structural or institutional change [23].

Language justice

Language justice is the human right that everyone holds to express themselves through the language with which they are most comfortable, to understand, be understood, and to authentically participate [25]. Importantly, language justice goes beyond language access (where the goal is understanding), towards full participation as the basis of power [25]. With these histories of language erasure, stigmatization, and marginalization, language justice is an antiracist praxis. When practiced, language justice ensures that people participate in the language they feel most comfortable. Community-based organizations and initiatives are leaders in promoting language justice (e.g., leadership by, hiring of, and authentic engagement of communities fluent in non-English languages). Studies document enduring connections between language and health outcomes, with persons with limited English proficiency experiencing barriers to health care access (e.g., navigating health care systems, screenings) and quality of health care (e.g., communication barriers, treatment errors) and adverse health outcomes such as glycemic control and uncontrolled hypertension [26–33].

Public health and health services researchers and funders have made progress in advancing the implementation of Culturally and Linguistically Appropriate Services (CLAS) standards in health-care settings, such as mandating professional interpretation services for patients in federally-supported healthcare settings. Additionally, public health agencies recognize the importance of language justice in public communications and research related to population safety and well-being and for community partnerships (i.e., building relationships, planning interventions, evaluating community health) [34–36]. Relatedly, the Department of Justice has an updated Language Access Plan to reassess and improve language access for individuals seeking or using governmental services [37]. However, public health and health services research have made little progress in enabling linguistically excluded communities to actively participate in research activities and decision-making processes that advance health promotion and health equity. Additionally, National Institutes of Health-funded Clinical and Translational Science hubs document institutional barriers to language inclusion [38]. Language justice also has implications for the accuracy and representativeness of research findings, especially in areas of high linguistic and cultural diversity. For example, the coauthors are part of a research center in California that reaches a multilingual population of over 13 million residents (Table 1); research conducted only in English would exclude just

Table 1. Population characteristics, Los Angeles County and Orange County, California, 2023

	Los Angeles County	Orange County
Total county population (age 5+)	9,188,375	2,979,343
Total population that speaks a language other than English at home	5,067,118 (55.1%)	1,398,272 (46.9%)
Total that speak Spanish	3,461,694 (68.3%)	726,257 (51.9%)
Total that speak Asian or Pacific Island languages	982,600 (19.4%)	478,238 (34.2%)
Total that speak other Indo-European languages	520,553 (10.3%)	151,685 (10.8%)
Total that speak other languages	102,271 (2.0%)	42,092 (3.0%)
Total population with limited English proficiency (LEP) *(among those that speak another language)*	2,195,334 (43.3%)	543,172 (38.8%)
LEP that speak Spanish (of total that speak Spanish)	1,487,932 (43.0%)	260,358 (35.8%)
LEP that speak Asian or Pacific Island languages (of total that speak Asian or Pacific Island languages)	497,905 (50.7%)	234,240 (49.0%)
LEP that speak other Indo-European languages (of total that speak other Indo-European languages)	178,954 (34.4%)	40,094 (26.4%)
LEP that speak other languages (of total that speak other languages)	30,543 (29.9%)	8,480 (20.1%)

Source: U.S. Census, American Community Survey Data Population Estimates for July 1, 2023 (one-year estimates).

over a third of residents (4.5M people) in our two counties and limit the relevance of study findings.

Community-based participatory research

Predominant approaches to research have inherent power imbalances, but CBPR creates conditions for community and academic partners to share equal power throughout the research process [39–41]. CBPR centers community priorities and knowledge coproduction, and often works across the translational research spectrum to ensure that research informs action (e.g., programs, policies, practices) [42]. CBPR has often focused on health inequities affecting communities of color, recently growing to reflect on CBPR processes through the lens of antiracism praxis [43]. Yet, little research has examined language justice through the lens of authentically engaging diverse communities in research processes. This manuscript critically reflects on facilitators and barriers to and recommendations for deep transformations of longstanding institutional structures to promote language justice in equitable community engagement and decision-making processes in CBPR for health equity.

UC END DISPARITIES: language justice practices and critical reflections as antiracism practice

The UCLA-UCI Center for Eliminating Cardiometabolic Disparities in Multi-Ethnic Populations (UC END DISPARITIES) is part of a NIMHD-funded national consortium of health researchers and community partners focused on prevention and management of chronic conditions, specifically cardiometabolic conditions that disproportionately affect communities of color in our catchment area. Recognizing the diversity of these communities, we actively reflect and incorporate language justice as an antiracist practice in the implementation of the Center's community engagement strategies (Table 2). Through a language justice framework, we describe and critically analyze our experience confronting and navigating institutional practices and processes whose status quo impedes authentic community collaboration and inclusivity. We discuss our experience embedding language justice strategies in partnership with community experts and provide best practices to

improve processes and suggestions for institutional changes to increase inclusivity, improve diversity in research, and promote health equity.

Methods

Setting

The Center's catchment area includes 4853.1 square miles in two southern California counties [44,45] so the majority of Center activities are remote, with annual in-person meetings alternating between counties.

Dataset and analysis

Data that inform this critical analysis of facilitators, barriers, and recommendations to strengthen language justice are from two sources: (1) notes from the Center's Community Engagement Core (CEC)'s bi-weekly meetings (involving 4 faculty, 2–5 staff, 2 community consultants connected with academic institutions) and (2) reflective discussions amongst CEC members and coauthors. The CEC collaborates with other Center members (e.g., administrative core, investigator development core, R01 intervention research projects) and affiliates (language justice practitioners) and works to incorporate reflective practices into these relationships. We conducted a thematic analysis, identifying areas in which we have confronted language injustices and sought to practice language justice. Within these, we analyzed the benefits and challenges to language justice. Reflective analyses and discussions amongst coauthors illuminated the critical reflections and lessons learned.

Results

We present three areas of practice of the Center's antiracism intervention to weave language justice into the Center's activities: team composition, mini-grants, and community-academic meetings. Within each area of practice, we discuss facilitators, barriers, and lessons learned regarding institutional reform to incorporate language justice throughout our community-engaged research (Tables 3 and 4). In each practice area, we highlight Center- and institution-level factors.

Table 2. Language use across the UC END DISPARITIES center

	Language preferences
University context	English-dominant environment: Courses (unless language-specific), most university-specific meetings, and any administrative paperwork are in English as a default language
Center Community Engagement Core (CEC)	Meetings held in English; community-facing written and oral communication mostly in English, with some Spanish language interpretation and translation
Center Community Advisory Board (CAB)	Meetings held in English*
Project 1: BP REACH CAB	1 English-language CAB (meetings held in English) 1 Spanish-language CAB (meetings held in Spanish)
Project 2: SERVE OC CAB	CAB members are fluent in English, Spanish, and Vietnamese
Center-wide retreats	2/4 (50.0%) retreats with simultaneous Spanish interpretation and printed materials in Spanish and English.

Catalyst award projects (6 funded to-date)	2/6 (33.3%) - projects in English only
	4/6 (66.7%) - projects reached multilingual communities
	   1/6 (16.7%) - project in English and Spanish
	   1/6 (16.7%) - project in English, Cantonese, Mandarin
	   1/6 (16.7%) - project in English and Samoan
	   1/6 (16.7%) - project in TBD NHPI language(s)

Pilot award projects
Investigator Development Core (24 projects funded to-date)
	Learning collaborative for awardees conducted in English
	Pilot award applications were only available in English
	16/24 (66.7%) projects conducted only in English
	8/24 (33.3%) projects conducted in multiple languages with support from bilingual staff and/or community organizations
	   6/24 (25%) projects conducted in English and Spanish
	   1/24 (4.2%) projects conducted in English and Mandarin
	   1/24 (4.2%) projects conducted in English and Marshallese

* During recruitment, a monolingual Spanish-speaker considered joining the CAB (in which case meetings would provide live interpretation). In the end, their bilingual colleague decided to be their organizational representative because of personal interest in the Center, not language ability.

Team composition

Some members of our team are bilingual and bicultural, reflecting antiracism praxis and bringing important lived experiences and cultural context to this work. We firmly believe that bilingual staff should not have to carry additional interpretation/translation roles unless explicitly incorporated into their job description with adequate compensation and recognition for this labor. Professional translators/interpreters are trained to translate complex terms and use best practices (e.g., collaborative translation and back-translation to ensure clarity and retention of original concepts and emotions), plus they are often deeply connected and familiar with local contexts. Relying on bilingual staff/students circumvents these processes, with the potential risk of inadequate compensation and exclusion from other professional opportunities for growth.

Reflecting our language justice principles and the reality that English and Spanish (and regional dialects) are the most commonly used languages locally (Table 1), we collaborate with professional interpreters/translators (English/Spanish) who bring lived experience and reflexive practices to inform language justice efforts. We have dedicated funding for language justice in our Community Engagement Core and Administrative Core (AC) budgets, including the recent establishment of a standing contract for professionally trained interpreters/translators (English/Spanish). This team of professionals provide simultaneous interpretation so that all participants can engage in real-time discussions. In Tables 2 and 3, we describe recommendations for language justice strategies, including engaging at least two professional interpreters for simultaneous interpretation (to allow for breaks), and the importance of meeting with interpreters/translators in advance to review meeting materials, technical terms

or concepts, and connect key issues with lived experience and practice-based knowledge. Additionally, our region boasts other languages (e.g., Arabic, Cantonese, Korean, Mandarin, Russian, Samoan, Tongan, Vietnamese) and one of our Center R01 projects includes Vietnamese families, so a wider range of interpretation/translation services is important for engaging grassroots organizations and communities, especially those with the highest rates of limited English proficiency (Table 1). These practices operate within a context of English language dominance in US institutions of higher education and research, as evidenced by nonlanguage-specific courses, university-wide communications, and administrative processes that are all in English. Institutional challenges related to incorporating language justice into our antiracism approach include needing to educate about and advocate for bilingual, bicultural experiences and skills as pay factors for staff and having sufficient funding to support the incorporation of language justice into Center and research activities (above and beyond traditional budgets that may not incorporate language justice).

Mini-grant processes

The CEC, with support from a Center-wide Community Advisory Board, awards two annual Community Catalyst grants ($20,000) to build capacity and/or support community- and faith-based organization-led activities to promote cardiometabolic well-being among affected communities in Los Angeles and Orange Counties. Grant applications and technical assistance webinars are designed to be short and are professionally interpreted/translated into Spanish to be inclusive of organizations without a strong research

Table 3. Benefits and challenges of language justice innovations

Language Justice Intervention Activities	Benefits	Challenges	Potential Solutions
Inclusion of bilingual/ bicultural team members	Regular communication with multilingual community members and/or study participants Increased insider perspectives and understanding of communities that are part of the study	Not all relevant languages or cultures may be represented on a study team Technical language requires professional interpretation or translation Delays with administrative processes for payments per event/activity for language justice professionals	Identify bilingual/ bicultural team members while designing studies and compensate language justice as a pay factor Standing purchase order for partnership with professional interpretation or translation team
Centering language justice in research (or mini-grant) processes	Translation of plain-language grant application into Spanish Live and recorded Spanish-language technical assistance webinar for grant applicants Bilingual/ biliterate team members who can review materials in other languages and communicate with community members Provision of study materials in multiple languages Increased community reach	Only able to translate Center-specific documents Legal implications for translation of university- or funder-specific documents Materials need to also be in plain language (not jargon or legalistic language) to be understood in any language	Written guidelines for content creation, including built-in timelines that allow for translation of materials and refinement of materials to improve accessibility and engagement Training in plain language Collective action with other departments (e.g., legal scholars) to advocate for change that will benefit other institutions and communities
Centering community in collaborative meetings	Increased opportunities for bi-directional engagement with communities Equitable opportunity for information sharing, dissemination, and collaboration	Need to provide documents with enough time for translation Need for more time for conversations (allow speakers to talk at slower speed, time for interpreter, spaciousness for diverse cultural practices)	Change study team norms to prepare documents far enough in advance to allow adequate time for translation and to support interpretation preparation Meeting agendas that allow for a more reasonable pace of speaking Training on use of simultaneous interpretation, including hands-on activities to understand the difficulty of listening and interpreting at the same time Physical cues or signs to remind speakers to slow down

or grant-writing infrastructure but have strong connections with historically and contemporarily marginalized communities. We received one grant application in Spanish, which two biliterate CEC members (native Spanish speakers) reviewed and scored in language (Spanish); it was professionally translated into English so other grant review process members could read it.

We recognize several institutional challenges related to integrating language justice into the mini-grant process. First, awardees need to navigate the English-only paperwork from our universities and the external funder. Our multilingual application process is currently on hold due to the potential legal ramifications of translating contractual and financial documents that require institutional-level changes. Second, the pre-award process was onerous for a mini-grant, including technically complex and legalistic paperwork for users with nonlegal backgrounds. This underscores the importance of addressing language justice through a structural racism lens (e.g., across institutions), and the need for expertise and buy-in at multiple levels (e.g., Center leadership, university administrators, funders).

Centering community in collaborative meetings

Our Center has bi-annual convenings (1 in-person, 1 virtual) that include community and academic partners, trainees, and staff to share information and enhance coordination of activities. In these meetings, we work to increase English/Spanish language access. With virtual meetings (e.g., Zoom), interpreters provide simultaneous interpretation through specific audio channels. At the beginning of the 2024 in-person retreat, professional interpreters explained language justice and how to use the interpretation equipment. Interpreters highlighted the importance of collective practices for language justice, such as avoiding acronyms and speaking clearly at a slow-to-moderate pace to enable Spanish interpretations that often involve 20%–25% additional words. Interpreters introduced several hand signs to alert speakers to slow down or to speak up. Because this was a brief presentation at the beginning of the agenda, late attendees and presenters missed this critical information, which resulted in confusion and awkwardness. Following this retreat, professional interpreters created a short video on language justice with reminders to speak slowly and clearly, which they shared with attendees ahead of the subsequent virtual retreat.

One challenge with both in-person and virtual meetings was that only some attendees would utilize the interpretation equipment to facilitate simultaneous interpretation: wearing interpretation headsets in-person or choosing a specific language channel (e.g., English, Spanish) on Zoom. This meant that if a participant spoke in Spanish, the conversation would need to shift to consecutive interpretation (alternating between Spanish and English), which is time consuming. Additional challenges included a tightly scheduled agenda and content filled with jargon or densely packed information that can be difficult to access for non-academics and/or those with limited English proficiency. Even when asked to slow down, speakers would often speak quickly, perhaps out of habit, making it difficult for interpreters to match their pace.

These challenges of integrating language justice into bilingual community-academic spaces point to several insights and areas of

Table 4. Recommended practices for language justice

	Options	Considerations	Recommendations
Training	Individual/project level • Provide instructions for each event or activity Institutional level • Incorporate language justice into organizational trainings	For virtual meetings, having visual cues and reminders can be helpful, including extra reminders for attendees who join later For in-person meetings, having visual cues, especially from the interpreters, can help to ensure a smooth interpretation process	Practice using plain language on a regular basis, since that will help make information clearer in all languages Provide multiple reminders and cues about speaking slowly and clearly for interpreters or writing plainly for translators
Translation of written materials	Individual/project level • Biliterate staff member • Professional translator • Technology Institutional level • Standardized approach and expectation to provide multilingual written materials • Work with Human Resources to formalize translator roles, including ensure appropriate qualifications and compensation • Standing resources to help verify translations	Staff members' language skills should not be assumed, they should be confirmed by someone who knows the language Translations should be reviewed by community members for accuracy Technology should be vetted ahead of time Qualifications for translators should be reasonable (i.e., their expertise is in communicating in their languages, not necessarily having advanced degrees)	Collaborate with community-based interpretation and translation services Professional translation is ideal for most research materials, especially for lengthy translations, although biliterate staff members can help to verify the accuracy of these translations. Allow extra time for translation before final formatting of materials, since documents may be different lengths in different languages
Interpretation for verbal communications	Individual/project level • Bilingual staff member • Professional translator • Technology Institutional level • Standardized approach and expectation to provide interpreters • Work with Human Resources to formalize interpreter roles, including ensuring appropriate qualifications and compensation • Standing resources to help verify translations	Staff members' language skills should not be assumed, they should be confirmed by someone who knows the language It can help to have bilingual team members also listen to the simultaneous interpretation for accuracy Other languages may use more words than English, necessitating more time for proper interpretation Technology should be vetted and tested ahead of time (e.g., headsets, Zoom interpretation feature) Qualifications for translators should be reasonable (i.e., their expertise is in communicating in their languages, not necessarily having advanced degrees)	Professional interpretation is ideal, with biliterate staff members that can help to verify the accuracy of the interpretations There should be at least two interpreters to allow for mental breaks, especially for meetings that will last an hour or more. Events should allow for sufficient time for individuals to speak at a pace that is comfortable for the interpreters
Dissemination of information	Individual/project level • Simultaneous interpretation • Separate events by language • Ad hoc translation of some materials Institutional level • Standardized approach and expectation that information will be shared in multilingual formats • Work with communications and/or marketing departments to ensure standing resources for sharing and reviewing multilingual resources	Depending on the context, it may be helpful to have everyone in the same meeting with the option to participate in their preferred language. This way, everyone can see they are getting the same information at the same time. In some situations, it may be helpful to have language-specific gatherings, especially for population-specific conversations For written materials, there may need to be adjustments for formatting because content may be different lengths in different languages	Professional interpreters/translators or bilingual/bicultural staff or consultants should be involved with designing how information is disseminated, including through which channels

future intervention. First, learning and practicing language justice is relatively new for many Center members and takes time and practice to unlearn dense, fast-paced, and jargon-filled communication practices. Second, reducing time pressures can facilitate language justice. For example, short presentation times (e.g., 10 minutes) and limited audience participation opportunities may contribute to efforts to speak quickly, sharing a lot of content in a short time. A more inclusive design would commit to less content and more discussion time (vs. covering more topics). Relatedly, language justice needs to happen at every level (e.g., agenda planning, activity guidelines) and should not be restricted to the

responsibilities of the CEC or professional interpreters. To address these areas for growth, professional interpretation collaborators have offered to hold a workshop for Center members to understand how to better communicate with a broad audience, which would make it easier to translate from English into other languages. Further, language justice goes beyond language access to provide the full array of preferred languages reflected by the communities with whom the Center engages, allowing authentic participation. While many elements of centering language justice in collaborative meetings are the responsibility of the Center, language justice in wider collaborative settings is facilitated or

hampered by broader institutional (e.g., university, funder) cultures that value (or not) communicating across languages and positionalities (e.g., community, academic) and designing priorities and agendas that are rooted in building relationships, fostering open dialogue and working towards collective impact (vs. packing a lot of content and/or speaking at communities).

Discussion

We close with recommendations to promote language justice for antiracist research to advance health equity, including dedicating needed time and processes to learn about and practice language justice; integrating language justice throughout research processes; adequately funding language justice within research budgets and compensation structures; equitably engaging bilingual, bicultural staff and language justice practitioners; and creating processes for incorporating language justice into written and verbal research and collaborative activities. The following sections elaborate on these recommendations, including the institutional changes needed to support these recommendations.

First, foundational to language justice as an antiracism praxis, academic institutions, funders, academic centers, and research teams should critically reflect on who benefits from current and historical racial hierarchies and how to transform racial hierarchies. This exercise is not abstract; instead, it is rooted in lived experiences and concrete examples. In academia, this process involves reflecting on the historical origins of US higher education, which was created by and for cisgender white, wealthy men; the historical and contemporary expression of white dominant culture within academia and research; and institutional- and individual-level barriers to transforming higher education and research to practice antiracism (e.g., perceptions of who might "lose" power if we transformed the status quo) [46,47]. Such reflections are often ongoing and iterative; involve individual, group, and institutional reflection and dialogue; necessitate connecting individual lived experiences and positionalities with the racial injustices of our time and institution-level strategies to promote racial equity; and are designed to identify pivot points and commitments to multi-level transformations (e.g., individual, academic, Center, institutional) to promote racial equity and address barriers to language justice.

Second, aligning with equity frameworks, language justice requires deep engagement and participation by everyone in all phases of research and is not an afterthought or restricted to community-facing strategies. This necessitates engaging multi-lingual and multicultural staff and partnering with practitioners who understand best practices for language justice in research and collaborative activities. Building a critical mass of public health and healthcare professionals of color with a diverse array of language abilities and lived experiences is important for building research capacity for language justice. Language justice should not be considered optional (e.g., only for those not fluent in English), nor is language justice the sole responsibility of professional interpreters/translators or bilingual staff. Language justice begins with a consistent use of plain language, explaining complex phenomena in tangible ways that make information more accessible to the public and across disciplines, and helping to facilitate interpretation/translation into additional languages.

Third, language justice is a collective commitment that takes time to practice in teams and collaborative spaces. Language justice requires a shift from dominant fast-paced research strategies, early integration into the process (vs. after an activity is designed), providing guidance (e.g., avoid acronyms, define terms, speak at reasonable pace), and building in time to professionally translate written materials in advance of presentations or material distribution. Meetings or other collaborative activities warrant spaciousness for everyone to have the opportunity to participate. Cultural norms can impact language in many ways, including respectful silence or deferral to other speakers according to social factors such as age (e.g., when elders are speaking) or education (e.g., when *doctoras* are speaking), which could be misinterpreted as having nothing to say. Furthermore, language justice is a new practice for many researchers, so teams should have time and grace to practice applying language justice. Antiracism involves moving away from fast-paced and/or unreasonable timelines and tightly-scheduled agendas (e.g., capitalistic, white supremacist culture). Language justice is an important component of antiracism approaches that invite higher quality communication and collaboration across languages and lived experiences. In health equity scholarship, investments in language justice hold promising potential to deepen connections, relationship building, analysis of structural and social drivers of health inequities, and envisioning and implementing antiracism interventions.

Fourth, language justice requires institutional investments, including adequately compensating bilingual staff (versus adding this on top of their responsibilities), ensuring paperwork and processes are available in language and in plain language, and training staff and collaborators in inclusive language practices [48,49]. Research budgets should support language justice to engage communities (i.e., equitable compensation, sufficient interpretation/translation budget), and funders should set policies mandating language justice to be planned and practiced and adequately fund language justice. We emphasize the need to build a multilingual and multicultural workforce and partner with professional interpretation/translation teams, rather than settling for imperfect technologies that make errors and miss important cultural nuances, tones, or idioms. Policies that mandate, fund, and sustain bilingual, bicultural university staff – with institutional funding separate from research grants – are an important starting place for institutional change to foster language justice. The growth of artificial intelligence (AI) systems has been an important tool for supporting language translation in real time, often in the context of limited or no interpretation services. However, we caution against reliance on AI alone for translation and interpretation services given that language is often locally, culturally, and historically specific. AI-based translations may not be sensitive to these nuances, especially for languages that are less common or that may not have a standardized written form [52–54]. Language reflects the evolution of rich and complicated social, economic, and political histories and cultures, but generative AI tools lack this nuance because they are trained on internet data dominated by a limited number of languages. This risks widening existing inequities, further endangering less-common languages or languages without a standardized written form, and creates potential legal or privacy risks due to inaccuracies and external vendor access to data [52 –54].

Implications for research

To integrate language justice into academic Centers informed by the principles of CBPR, deeper transformations of research and decision-making processes are critical. Our experience points to the centrality of center leadership and institutions (e.g.,

universities, funders) committing to personnel, cultural, and bureaucratic transformations to promote language justice. While institutional change may seem daunting, it is important to recall that institutions are led by individuals who have the power to prioritize and commit to institutional transformations. The consequences of not addressing language justice are many, including perpetuating racist structures in public health research and practice and failure to engage in equitable relationships across community and academic partners. The pandemic illuminated the consequences of linguistic exclusion in communicating about urgent COVID-19 updates and resources [6]. Without a commitment to language justice in research, we risk worsening health inequities over time and maintaining inequities in community-academic structures and processes. Applying language justice to academic Centers informed by the principles of CBPR enables community-academic collaborations to move closer to authentic community participation and ownership [55].

Strengths-based approaches and systems and policy change within academic institutions are critical to equitably integrate communities into research, build multiracial/ethnic coalitions that equitably engage linguistically excluded communities, and promote health equity in research. The changing political climate is likely to further harm linguistically excluded communities. We continue to query how to apply language justice within our Center and build more accessible research infrastructure. California Senate Bill (SB) 1078 was a promising example of a systems change approach to language justice [56]. If it had passed, SB1078 would have created an Office of Language Access, focused on implementing federal and state language access laws by building the multilingual capacity of California Health and Human Services programs (e.g., Medi-Cal, social services, emergency medical services, state hospital systems) to ensure that residents with limited English proficiency have in-language access to resources [56]. Universities and academic Centers could model a similar approach to improving language access to educational, public health, and health services information; education; research; and collaborative research opportunities. For example, federal guidelines for protecting research participants require in-language consent forms when studies include participants with limited English proficiency; likewise, community-academic partnerships and mini-grant mechanisms to support community-driven strategies should be available in-language. Moreover, university post-award grants management units would benefit from multilingual, multicultural staff trained to understand and support community-academic collaborations. Academic Centers can think collectively about how to incorporate language justice Center-wide, such as supporting research in plain language with multilingual materials. Funders and academic Centers should press researchers to justify the exclusion of limited English proficient participants and/or cite this limitation of the generalizability of their findings. Consequences of upstream institutional failures to address language injustices and lack of a critical mass of public health and healthcare professionals of color include potentially irrelevant research and ineffective application or utilization of public health and health services resources [57].

Conclusions

Language justice is not optional. Language justice is critical for ensuring that everyone can communicate, understand, be understood, participate, and access accurate information in a timely manner. As a component of antiracism praxis, incorporating language justice into academic Centers focused on health equity necessitates the buy-in, leadership, and support of all community and academic partners, Center leadership, universities, and funders. Academic Centers have much to learn about language justice from communities, language justice practitioners, and multicultural and multilingual students, staff and faculty in universities who are reflecting on and applying language justice.

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