

# Lessons about language barriers (not) learned from the Covid-19 pandemic

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## Language barriers and health disparities

Migrant and indigenous minorities have been found to have suffered more from the Covid-19 pandemic than the majority population on indicators such as hospitalizations, ICU admissions, and mortality rates in almost all contexts in which such comparative data were collected (Mazalai et al., 2023). These disparities are due to a range of factors, related first and foremost to disadvantageous housing, employment, and social security conditions. Additionally, “language barriers and other structural obstacles to access[ing] health services and communications regarding prevention measures” were identified as a key factor by high-profile international organizations such as the intergovernmental Organization for Economic Cooperation and Development (OECD, 2022, p. 2).

Calls to mitigate language barriers faced by linguistic minorities as part of the emergency response arose early in the pandemic (e.g., Grey, 2020; Y. Li, 2020; Piller, 2020a) and by the end of 2020, the OECD advised governments internationally to ensure the availability of “timely, accessible and easy-to-read official information on COVID-19 in multiple languages” (OECD, 2020, p. 2).

There can be no doubt that, at all levels of government, many jurisdictions progressively made multilingual public health information more available. Translated materials were increasingly put into circulation from Amazonia (García, Haboud, Howard, Manresa, & Zurita, 2020) to Zambia (Costley, Kula, & Marten, 2023). The *Language on the Move Covid-19 Archives* (Piller, 2020-2023) offer a collection of international case studies of public health communications aimed at linguistic minorities. However, the proliferation of public health communications in multiple languages does not seem to have been particularly effective in reducing health disparities. As legal scholar Grey (2023) notes, even jurisdictions with a high availability of multilingual health communications fell short of realizing their right-to-health obligations.

This chapter examines the quality of multilingual Covid-19 public health information materials against the mnemonic “4A” criteria of availability, accessibility, acceptability, and adaptability (Federici & O’Brien, 2020). I will show that, in most contexts, only availability of multilingual materials improved noticeably, with little progress being made on accessibility, acceptability, and adaptability. The chapter concludes with reflections on the prospects of better linguistic disaster preparedness in the future as multilingual communications have become swept up in a broader crisis of public communication, where the proliferation of misinformation and disinformation with its concomitant breakdown of social trust may well make the suppression of epidemics impossible (Sontag, Rogers, & Yates, 2022).

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## Availability: too little, too late

Increasing recognition of multilingual healthcare communications as an essential service preceded the pandemic. At least since the 1970s, international law has framed translations as a means to upholding other human rights, including the right to health (Mowbray, 2017; Núñez, 2013). These international frameworks have been playing out differently in different parts of the world. In the US, for instance, language assistance provisions have been progressively incorporated into healthcare services since the passing of the Civil Rights Act of 1964. Multilingual service provision gained further traction in 2000, when Executive Order 131166 was signed (Hunt, 2007). Also known as “Improving Access to Services for Persons with Limited English Proficiency,” this order requires every federally funded organization to ensure language service provisions for its clients with limited English proficiency.

In another example from a very different political context, multilingual service provision had also been expanding in China (J. Li, Zhang, & Piller, 2023). There, the concept of 语言服务 (yǔyán fúwù; “language services”) had become part of the country’s modernization drive since the early 2000s (Zhang, 2021). Language services were envisioned as the need to diversify language learning, to develop language technologies, and to expand multilingual communications. Language services as part of a disaster response first rose to prominence during the 2008 Wenchuan and 2010 Yushu earthquakes and multilingual emergency service provisions were subsequently included in the 13<sup>th</sup> National Five-Year Plan (2016-2020). The focus of multilingual emergency services are speakers of Chinese varieties other than Putonghua, speakers of recognized indigenous minority languages, sign language users, and, to a lesser degree, international students and cross-border migrants.

Despite such favorable policy frameworks, internationally, the availability of public health communications aimed at linguistic minorities during the pandemic was largely ad hoc and can be summed up as “too little, too late” (Piller, Zhang, & Li, 2020).

In Taiwan, for instance, public communications regarding protection measures, social distancing requirements, lockdowns, or case numbers were predominantly communicated in Mandarin Chinese (Chen, 2020). Some public announcements were simultaneously translated into sign language and there was occasional use of Southern Min (Taiwanese). Translations into migrant languages such as Burmese, English, Filipino, Indonesian, Malay, Thai, and Vietnamese followed relatively late, were haphazard and mostly restricted to posters. There were no government communications at all in Taiwan’s indigenous languages. Indigenous groups were left to create their own health communications, as was the case in many other international contexts as diverse as Cameroon (Okumbu & Di Carlo, 2021), Mexico (Haimovich & Márquez Mora, 2020), or South Africa (Diko, 2023).

Speakers of migrant languages were similarly underserved. For instance, a study of Covid-19 signage in Abu Dhabi, where foreign residents account for about 90% of the population, found that virtually all such signage was only in English and/or Arabic (Hopkins & van den Hoven, 2022). By contrast, in a demographically similar context, Qatar, the government began to disseminate Covid-19-related information in South Asian and South-East Asian languages relatively early in the pandemic (Ahmad & Hillman, 2021). Furthermore, these communications were expanded into an increasing

diversity of media, including radio and religious sermons with a wide reach. An increase in the availability of diverse Covid-19-related public service communications in migrant languages was also observed in other contexts such as Australia (Karidakis et al., 2022), Canada (Marshall, 2023), or Denmark (Brønholt et al., 2021). However, these increases tended to be from very low levels and usually were far below the levels of linguistic need (Nezafat Maldonado, Collins, Blundell, & Singh, 2020).

Overall, there was clear, even if differential, progress in the availability of public health communications aimed at linguistic minorities over the course of the first two years of the pandemic. Even so, availability was surprisingly limited considering that the importance of multilingual service provision to realizing human rights, including the right to health, had been coming into focus ever more clearly over decades prior to the pandemic. Despite relevant legal frameworks, the pandemic has made clear that the information needs of linguistic minorities had, by and large, not featured in the emergency planning of governments worldwide.

## Accessibility: hard to find

Although multilingual service communication was generally lacking in the early phase of the pandemic, availability changed over time and more and more translated materials became available, as we have just seen. The second question to ask therefore is how accessible these communications have been.

Consider a poster from the University of New Mexico Health System, which made the rounds on social media in late 2022.<sup>2</sup> “Don’t speak English?” it asked and went on to advise: “We can help! You have the right to a free interpreter. Ask the desk when you check in. Or call 272-5399. [...] We may be able to help even if you are not a US citizen. Call 272-2521 to learn more.” The irony of offering language support to a non-speaker of English in English and to instruct them to ask for more information over the phone in English is hard to miss. Yet, the contradiction had clearly escaped the designers of the poster.

The poster provides an example of multilingual services being available to people with limited English proficiency, yet not accessible because their availability is communicated only in English. Even if availability is communicated in the target language it might still not be accessible as in the example of an Australian awareness campaign for emergency services. The campaign poster is available in 33 languages.<sup>3</sup> Yet in each of them, the instruction for people who have “difficulty speaking English” is to “ask for an interpreter once you have been transferred to the emergency service you requested.” These instructions are obviously oblivious to the fact that someone with limited or no proficiency in English might have difficulty completing the initial step of requesting a

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<sup>2</sup> At the time of writing this article in January 2024, I could no longer retrieve the pithy tweet that is my source for this image. A Twitter call-out for the citation and a reverse image search yielded no results (Piller, 2024; where you can also view the image). Once identified, I will gladly acknowledge the original poster in future publications.

<sup>3</sup> <https://www.triplezero.gov.au/triple-zero/awareness-campaign> (last accessed 2024-01-21)

specific emergency service (ambulance, fire, or police) in English or might not be able to request an interpreter into their language though the medium of English.

One way to overcome the latter problem are so-called “language identification cards.” These cards contain lists of language names, usually in the language itself and in English (e.g., “中文” / “Chinese”). Patients who need assistance in a language other than English are encouraged to find their language and point to it so that the healthcare provider can arrange for an interpreter. One such language identification card that is widely displayed in clinics around Australia lists 66 different languages.<sup>4</sup> Usually printed on two adjacent laminated A4- or A3-sized posters, the card is hard to read, particularly for the short-sighted. I often put the poster up on a large screen and ask my students to find their language on the card. My students are bilinguals with high levels of proficiency in English, they are highly literate, and not sick, in pain, or confronted with any of the woes patients attending a clinic often have. Even so, they regularly struggle to promptly identify their language. They find the long list of language names overwhelming and the sort order non-transparent. The sort order is, in fact, alphabetical by English language name but that fact is masked by the many different languages and scripts. Using the card thus requires knowledge of the name of one’s language in English and relatively high levels of literacy in a language that uses the Latin alphabet. These difficulties are further complicated by the fact that some languages have more than one English name. For instance, Chinese speakers are likely to look for their language under “C” but the entry on the card is under “M” for “Mandarin.”

Another accessibility issue related to language lists is the way translated materials are stored, particularly on websites. On most websites that offer versions of a document in multiple languages, those translations are stored in a section labelled “Language,” “Translation,” “Google Translate,” or similar. This practice can make translation hard to find because access is through the main site in the dominant language and the information architecture is – counterintuitively – not built around content but around language names. In other words, the monolingual logic of multilingual service provision constitutes a barrier to accessibility (Piller, Bruzon, & Torsh, 2023). As a result, Covid-19 information can be difficult to navigate for users of minority languages, even if a version in their language exists (Kusters, Dean, Gutierrez, Sommer, & Klyueva, 2023).

For multilingual public service communications to be accessible, they need to be delivered on multiple platforms and in multiple modes. Yet multilingual Covid-19 communications heavily favor written and digital modes. For instance, in Khyber Pakhtunkhwa, one of the four provinces of Pakistan, essential Covid-19 information was preferentially communicated on social media platforms Facebook and Twitter although the literacy rate in the province is only around 50% and less than 1% of the population has Internet access (Abbasi, 2020). In a similar low-literacy and low-technology context in rural West Nusa Tenggara province in Indonesia, authorities also relied heavily on providing health advice in writing and on digital platforms (Hidayat, 2020). Furthermore, translations made heavy use of English loanwords to communicate information about the disease, making information difficult to understand even if it was in the audience’s preferred language. As elsewhere,

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<sup>4</sup> The card is available for download from [https://www.health.qld.gov.au/\\_data/assets/pdf\\_file/0028/816436/Language-ID-Card.pdf](https://www.health.qld.gov.au/_data/assets/pdf_file/0028/816436/Language-ID-Card.pdf) (last accessed 2024-01-21).

civil society organizations had to step into the breach and the loudspeakers of mosques became an important means to disseminate information.

In sum, even if available, multilingual Covid-19 information was rarely accessible. Instead of being delivered on multiple platforms and in multiple modes, overreliance on (digital) written communications created significant barriers. It also needs to be mentioned that poor readability of written materials is not only a problem for speakers of minoritized languages but also affects speakers of the dominant language, as Piller (2020b) shows in a readability analysis of Australian public health restrictions published in English. Attention to readability therefore needs to be a major accessibility consideration to ensure equitable access to healthcare for people with low levels of education, a group among which indigenous and migrant people are overrepresented due to their educational disadvantage.

### **Acceptability: low quality translations**

Acceptability constitutes another quality indicator of multilingual public service communications. Acceptability relates to accuracy and appropriateness of a communication, and shortcomings have been observed in the quality of both language and content.

Regarding language quality, media reports about translation errors started to make the rounds as soon as translations became widely available. For example, major media outlets in Australia carried news that mask wearing advice in Arabic was “non-sensical,” that lockdown instructions in Persian were partly in another language, Arabic, and that information aimed at Indonesian speakers was actually in Turkish (Dalzell, 2020; Renaldi & Fang, 2020). Problems such as these are likely due to human error but the widespread reliance on automated translations further compounded the problem.

Increased awareness of the importance of multilingual communications during the pandemic has coincided with significant advances in translation technologies over the past decades. Automated translation apps such as Google Translate have become widely available on mobile devices and as add-ins on websites. As a result, their uses in a variety of social domains, including healthcare settings have been expanding rapidly (Panayiotou et al., 2020; Vieira, O’Hagan, & O’Sullivan, 2021). Unfortunately, the explosion of automated translation tools has not been accompanied by any significant quality assurance measures when these tools are used “in the wild” in real-life social interactions, particularly in high-stakes domains such as healthcare (Ji, Bouillon, & Seligman, 2023). Automated translations of Covid-19 testing information on NSW government websites, for instance, was found to be marred by numerous errors and difficult to read even in the case of a high-resource language such as German (Piller, 2020c). Generally, the quality of automated translation tools remains too low to be safely used in communications that carry any level of risk (Hwang et al., 2022; Piller, 2023).

The acceptability of low-quality translations can be further reduced if translations are only made available in select languages and largely have a display effect that scapegoats certain language communities. For example, signs in Hungarian aimed at Roma migrants in Canada have been found to be unacceptable to the target audience for two reasons: first, “Google-Hungarian” on the signs was

actually incomprehensible to them, and second, in the absence of translations into other languages they felt singled out as rulebreakers and troublemakers (Angermeyer, 2017, 2023). Similarly, the uneven implementation of Arabic and Vietnamese signage in Seoul has been described as singling out these target audiences as likely offenders (Chesnut, Curran, & Kim, 2023).

In addition to low levels of linguistic acceptability, the acceptability of multilingual health communications may also be limited due to inappropriate content. Many Covid-19 public service communications were simply translated verbatim without attention to local contexts. For instance, the Peruvian Ministry of Health published translated handwashing infographics in over a dozen indigenous languages as early as March 2020. All these translated materials were exactly the same and included translated phrases such as “use plenty of water to wash your hands,” “rinse your hands with plenty of water,” and “turn off the faucet with the paper towel you just used to dry your hands” (Hermosa Cavero, 2020). Given that only two-thirds of Peru’s indigenous communities have access to safe water and only one-third to sanitation facilities, such information is obviously unactionable for the target audience. In another example from neighboring Ecuador, lockdown instructions in indigenous languages were similarly inappropriate for the target audience. Here, too, “messages were based on direct translations from Spanish and a Western cosmovision, making understanding and acceptance by Kichwa speakers difficult” (García et al., 2020, p. 41). The injunction to “stay at home,” for example, was translated literally and based on an implicit understanding of “home” as an urban middle-class house inhabited by a nuclear family.

In sum, the acceptability of multilingual crisis communication was limited by low quality translations. Translations without adaptation center the message. To improve acceptability a shift from a message-centric approach to crisis communication towards a community-centric approach is needed (di Carlo, 2020).

## **Adaptability: (not) learned from experience**

The adaptability criterion refers to having provisions in place that ensure that multilingual crisis communications can be adapted to shifting requirements, technological demands, diverse hazards, and the needs of mobile populations. As outlined so far, internationally, public health communications related to Covid-19 fell short on the lower-level criteria of availability, accessibility, and acceptability. It is therefore unsurprising that there is little evidence of a consistent approach to adaptability. The closest evidence there is of adaptability comes not from government communications but from community groups and NGOs.

An example of an NGO adapting their approach in response to feedback comes from a Japanese NGO serving Burmese, Nepali, and Vietnamese migrants (Kiyohara et al., 2022). The NGO, a migrant support network, had been in operation since 2018 and pivoted to disseminating information about Covid-19 prevention measures in early 2020. Initially hosting translated materials on their website, they soon discovered that they were rarely accessed. Interviews with members of the target audience uncovered that social media, particularly Facebook, was a preferred source of information. Consequently, the organization set up Facebook groups to disseminate videos about how to stop the spread of the virus in Simple Japanese, English, Burmese, Nepali, and Vietnamese. Unfortunately,

views of these videos were very low and did not exceed 300 in any language. Attempts to post in larger migrant-focused Facebook groups proved equally ineffective. Eventually, the organization began building relationships with the managers of large Facebook groups targeting Burmese, Nepali, and Vietnamese audiences more broadly. Managers not only acted as facilitators but also helped design and revise messages; with some success, as evidenced by the fact that one message about Covid-19 vaccination in Vietnamese was viewed over 300,000 times.

Communications emanating from civil society organizations increased substantially in volume and impact over the course of the pandemic (Krystallidou & Braun, 2022). Therefore, the adaptability of their communications is clearly a positive. Yet, we cannot overlook two problems. First, examples such as the one presented by Kiyohara et al. (2022) constitute only very small successes; the authors themselves call the Vietnamese vaccination message reaching over 300,000 viewers a “silver lining.” Small organizations designing, implementing, and monitoring their individual multilingual communication strategies in the midst of a crisis is clearly not feasible in the absence of a broad emergency communication strategy. Second, the fracturing of the communicative space that is evident in the mushrooming of bottom-up initiatives may have exacerbated existing inequalities. The most vulnerable groups are often the least capable of mounting their own information campaigns. The fracturing of public service communications also opened the door for the mis- and disinformation campaigns that have characterized the most recent phase of Covid-19 communications and the widespread breakdown of public trust that has ensued.

## **The future of (multilingual) public health information**

This chapter has reviewed public communication campaigns aimed at indigenous and migrant linguistic minorities during the Covid-19 pandemic. Using the criteria of availability, accessibility, acceptability, and adaptability to structure the chapter, I showed that advances in the availability of multilingual information did not necessarily have the desired positive health effects because, by and large, they were not accompanied by improvements in accessibility, acceptability, and adaptability. The lessons about how to bridge language barriers that can be drawn from the pandemic are thus clear: public health information needs to be made available in all the needed languages, in modes and on platforms that are accessible to the target audience, in forms that are acceptable to the community, and in ways that are responsive to changing circumstances (Y. Li, Rao, Zhang, & Li, 2020).

Yet these lessons, which were essentially already known before the pandemic, are now complemented by the darker lesson that the failures in public health communication during the pandemic have not only done nothing to mitigate the differential impact of Covid-19 on minoritized populations but have further exacerbated health disparities. I will highlight three aspects of this darker lesson, related to increased language barriers, under-vaccination, and broader breakdown of trust.

First, language barriers to health relate not only to public health communications. While public health communications have been the focus of this chapter, they are closely intertwined with other language barriers to health that manifest as direct and indirect pathways to health disparities, including health literacy, access to healthcare, and interaction problems between healthcare providers and patients (Terui, 2017). These language barriers were further exacerbated by the Covid-19

pandemic. For instance, a British study found that the move to telehealth and virtual medical appointments proved particularly difficult for patients from non-English-speaking backgrounds and made it even harder for them to access healthcare (Knights et al., 2021).

Decreased access to face-to-face interactions with healthcare providers may be one of the factors in the lower vaccination rates of minoritized populations, the second lesson. The main reasons for the lower vaccination rates of indigenous and migrant populations that have been observed in various countries were lack of trust in government and health authorities and a lack of access to vaccines, including information about vaccines (Abba-Aji, Stuckler, Galea, & McKee, 2022; Crawshaw et al., 2022).

Combatting vaccine hesitancy in minoritized populations may require different strategies than those addressed at majority populations. A British study, for instance, found that some migrants who were well informed about the importance of vaccination nevertheless avoided getting vaccinated because they believed that vaccination was coupled with visa status checks (Doh et al., 2021). Even after the government announced that no visa checks would be conducted at vaccination centers, interviewees remained unaware. This is in line with the finding that (multilingual) public service communications are insufficient to address vaccine hesitancy in contexts where the government is perceived as untrustworthy (Ezeibe et al., 2020). In such contexts, public health measures can only be implemented through relying on social trust at local levels. Promising strategies include the expansion of primary care facilities and personal communications through trusted individuals such as GPs, outreach nurses, and community leaders (Abba-Aji et al., 2022).

The third lesson then relates to trust in authorities and the public service communications emanating from them. The pandemic has gone hand-in-hand with an epidemic of mis- and disinformation. Public health measures such as social distancing, mask wearing, or accepting immunization can only be effective if there is a high level of compliance. Unfortunately, the public trust necessary to ensure compliance has been shattered in societies around the world (Klein, 2023). The loss of trust has been so devastating that mathematical modelling now suggests that it may be impossible to prevent the spread of contagious diseases in the future (Sontag et al., 2022).

The spread of mis- and disinformation is widely linked to social media and the ubiquitous digitization of communication. The recent proliferation of autogenerated text through so-called AI tools has further contributed to the explosion of context-free messages that are independent of social relationships. It is here that we come full circle: the shortcomings of multilingual public health communications discussed in this chapter are largely those of digital communications. The written mode on digital platforms has dominated public health communications and, concomitantly, research into language barriers during the pandemic. The key lesson about language barriers learned from the Covid-19 pandemic then must be to approach health communication holistically within the contexts of specific communities. For researchers, this is an urgent call for more engaged, ethnographic, and participatory research. For policy makers and everyone else, it is an equally urgent call to attend to language barriers holistically, both as part of disaster preparedness and as part of the ongoing effort to reduce inequalities and strengthen social participation in today's diverse societies.



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