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Enhancing COVID-19 public health communication for culturally and linguistically diverse communities: An Australian interview study with community

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ABSTRACT

Background: Public health crises present challenges for providing accessible, timely, and accurate health information to culturally and linguistically diverse (CALD) communities. Aim: The aim of this qualitative project was to explore strategies used by CALD community organizations to improve communication about COVID-19 for their communities; we also aimed to identify gaps and challenges. Methods: We interviewed 16 representatives from Greek, Italian, and Chinese CALD organizations in Melbourne, Australia. The interviews were analyzed thematically. Results: Community leaders played a significant role in engaging their community members with accurate key health information. There were differences between language communities about preferred channels for receiving information. As the pandemic intensified, there was a shift from written communication to more interactive exchanges between authorities and community leaders. Discussion: The findings suggest effective public health communication is enhanced by the mediation and outreach strategies adopted by CALD community organizations; further, stakeholders need to be cognizant of heterogeneity of needs and preferences. This may optimize information dissemination to meet specific needs. Conclusions: The CALD organizations have developed communication strategies involving different kinds of mediation to reach specific sub-groups, especially the most vulnerable. These strategies can inform future public health engagement.

KEYWORDS

COVID-19, intercultural communication, mediated communication, migrants, pandemic, public health communication, qualitative

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Introduction

The World Health Organization's action plan 'Promoting the health of refugees and migrants' aims to have governments comprehensively address the health of migrants and refugees as part of the health needs of the overall population (World Health Organisation [WHO], 2021). Governments' responses to the COVID-19 pandemic have particularly highlighted the need for effective communication with migrant populations as part of public health communication strategies.

A broad body of literature on intercultural health communication with culturally and linguistically diverse (CALD)' people identifies challenges and their consequences for refugee and migrant health, including language and cultural differences that impede access to health services (Paternotte, van Dulmen, van der Lee, Scherpbier, & Scheele, 2015; Schouten & Meeuwesen, 2006). Much of the knowledge about effective intercultural health communication comes from healthcare settings in which the focus is on interactions between clinicians and patients (Schouten et al., 2020; Woodward-Kron & Story, 2020) rather than from public health communication or communication about a public health crisis such as a pandemic. Effective strategies such as digital translation tools and multilingual e-Health applications to mitigate language discordance or a family-centred communication approach to address cultural preferences in healthcare (Schouten et al., 2020) may not be transferable to, or be effective in public health settings. Strategies that adopt an inclusive approach drawing on the linguistic resources and cultural knowledge of intermediaries such as family members, interpreters, and language concordant healthcare workers may hold promise for effective public health communication and messaging for CALD communities. Further, research from primary healthcare settings in Australia shows 'community navigators' can assist in improving access to healthcare services for CALD communities (Henderson & Kendall, 2011). This evidence suggests that intermediaries who have established relations with CALD people as individuals or as part of a CALD community group or organization can foster improved access to and equity in healthcare. Many migrants and refugees maintain social, faith-based, sporting, professional or service ties to others of similar language or cultural backgrounds in the form of CALD community organizations; it is possible that these groups and organizations play a role in safeguarding the well-being of the community during a public health emergency by, for example, relaying public health messages. The aim of this study is to explore strategies used by CALD community organizations to improve communication about COVID-19 for their communities; we also aim to identify gaps and challenges.

Literature Review

Public health risk and crisis communication during pandemics

The novel coronavirus outbreak (SARS-CoV-2) has had severe impacts on the lives and livelihoods of individuals and communities across the globe since the WHO declared it a pandemic on 11 March 2020 (WHO, 2020a). In response, governments initially introduced recommendations to reduce COVID-19 transmission and at later stages imposed legal

restrictions resulting in lockdowns of entire cities, closing of schools and universities, and severely restricting economic, cultural, and social activities. Key measures to limit transmission of the virus included hand washing, mask wearing, social distancing, and wearing of personal protective equipment. COVID-19 health measures nevertheless varied considerably between countries and over time (Hsieh & Kramer, 2021), which creates challenges for health communication in a globalized, digital world. There appears to be constant interaction between the global and the local (Kickbusch, 1999), resulting in 'glocal' challenges for public- health communication. Refugees and members of CALD communities are a case in point since they tend to communicate across several geographic, linguistic and cultural borders. Marlowe (2019) points to challenges faced by forced refugees when "language and cultural barriers, lack of local knowledge (including hazard awareness), [and] limited social networks... become barriers to effective communication, remains an essential tool for meeting public health objectives and aligning behaviour with the recommendations of public health experts (Finset et al., 2020; Freimuth & Quinn, 2004; Wild et al., 2020).

Risk communication contributes to improving public understanding of potential or actual health threats and facilitating behaviour change (Lowbridge & Leask, 2011). It has traditionally focused on the communication of hazards to potentially exposed communities (e.g. Cadwell, 2014) but has evolved to a large extent as a response to public-health and environmental disasters (Glik, 2007). Risk communication during COVID-19 can be described as crisis communication, which is "risk communication in the face of extreme, sudden danger such as the outbreak of a deadly disease" (Lundgren & McMakin, 2018, p. 3). Since COVID-19 is an evolving, highly infectious virus, it is accompanied by a stream of constant and changing information from multiple sources that the public is required to navigate (O'Brien, Cadwell, & Zajdel, 2021). This constitutes a problem not just for the creators of the messages but also for the intended recipients, particularly for those who may not have the linguistic, health and/or digital literacy to navigate what has been characterized as the pandemic's 'infodemic' (Zarocostas, 2020).

Risk and crisis communication does not involve a linear flow of information from health experts to recipients, using a one-size-fits-all approach. Rather "it is a 2-way dialogue between those with technical risk knowledge and information and an individual, group, or community in order to exchange information about, knowledge of, and experiences with a risk or risk situation" (Kain & Jardine, 2020, p. 101). A crucial aspect of risk communication is planning communication strategies by bringing together the recipients of the information and those who might be impacted by the outcomes (Henrich & Holmes, 2011). Effective government communication plays a major role in informing the public about "impending threats and best practices to minimize harm during emergencies" (Kim & Kreps, 2020, p. 399). It is often assumed by policymakers that behaviour change and compliance will result from simply providing information and giving an explanation of why people should adopt a particular behaviour (Kelly & Barker, 2016). A further consideration for health messaging is the variable trust that individuals have in the bearers of the message; in healthcare messaging involving different languages, it can involve both 'thick and 'thin' trust. (Hwahng et al., 2021). 'Thick' trust points to investing trust in family members as mediators and involves building interpersonal relationships that evolve over time. 'Thin' trust is then the kind invested in governments, health systems or professional interpreters because of their official status.

Bringing about behaviour change and compliance is thus complex and multi-faceted, as can be seen through the recent experience of culturally and linguistically diverse communities in Australia (e.g. Renaldi, 2021) and elsewhere (e.g. Siddique, 2020). For instance, Ataguba and Ataguba (2020) indicate that perceived miscommunication during the pandemic was particularly evident in CALD groups where trust in public authorities had been eroded.

Risk communication for CALD communities

As intimated above, some social groups are likely to be impacted disproportionately by COVID-19. These include the elderly, those living in residential aged care, people with disabilities, people with chronic conditions, and minority groups, including CALD communities (Smith & Judd, 2020). These segments of the population are likely to face communication barriers due to issues of socioeconomic disadvantage, and poor health literacy. This can be compounded when there is "a mismatch between the language in which [health] information is communicated and the linguistic repertoires of those who need the information" (Piller, Zhang, & Li, 2020, p. 505). Findings from previous pandemics such as H1N1-2009 (so-called Swine Flu) also identify these challenges, noting that rapidly changing understandings about the epidemiology of the disease and its impacts necessitate ongoing communication with all groups involved (Lowbridge & Leask, 2011). Health information is also increasingly delivered and accessed through communication technologies. While digital communication tools hold promise for overcoming language barriers for CALD people, including older people (Hughson et al., 2016), there remain considerable barriers to the use of technology by older adults to access health information and care (van Houwelingen, Ettema, Antonietti, & Kort, 2018).

The aim of this study was therefore to explore strategies used by CALD community organizations to improve communication about COVID-19 for their communities; we also aimed to identify perspectives on gaps and challenges. The study setting was Melbourne, Australia, with a focus on three of the city's largest CALD communities: Chinese, Greek and Italian. To gain an overarching perspective, we sought the perspectives and experiences of community organizations as well as other information mediators such as interpreters, translators and carers associated with the organizations.

The research questions were:

- 1. What strategies are used by CALD organizations to reach their communities about COVID-19 public health information?
- 2. How and to what extent is mediated COVID-19-related information perceived to be received and understood by the three CALD language (i.e. Chinese, Greek, Italian) communities in the Australian setting?

For the purposes of this project, 'mediated COVID-19 information' refers to public information provided by government and other authorities that is translated or adapted by community organizations to cater for the needs of their respective communities. 'CALD community organizations', or 'CALD organizations', refers broadly to not-for-profit or faith-based organizations that serve a language or migrant group for a range of purposes, including for social activities such as pensioner groups, or faith-based, recreational, or carer activities. Such organizations are a feature of the social fabric in migrant destination countries such as Australia.

Methods

Study Design

This study adopts a qualitative descriptive research design as it aims to discover and understand the perspectives of the people involved (Caelli, Ray, & Mill, 2003; Merriam & Merriam, 1998). Qualitative descriptive research lies within the naturalistic perspective, which facilitates the understanding of a phenomenon through the exploration of the participants' experiences and the meanings they attach to them. The use of interview data allows for the exploration of issues with participants by encouraging depth and rigor, and this in turn facilitates the emergence of new concepts (Doody & Noonan, 2013). This contributes to the richness of data, which is a prerequisite in qualitative description designs (Sullivan-Bolyai, Boya, & Harper, 2005). Thematic data analysis enables researchers to identify patterns of meaning across the data set.

Study setting

As noted above, the study was undertaken in Melbourne, in the State of Victoria, Australia. Melbourne has a population of just over 5 million, with 38.5% of its residents in 2016 born overseas. The top five languages spoken at home are Mandarin, Greek, Italian, Vietnamese and Cantonese. This is a reflection of well-established migration patterns of Italian and Greek migrants during the post-Second World War period, the arrival of Vietnamese and ethnic Chinese refugees from Indochina during the 1970s, and of migrants from China since the late 1980s (Hugo, 2007).

As governments are key stakeholders in public health communication, we give a brief overview of the Australian jurisdictional context. Australia has a federal system of governance, meaning that the responsibilities for the pandemic response are split between Commonwealth, State and Territory governments. This has led to primary coordination of health pandemic communication being delegated to the State and Territory level. In response, each State and Territory (henceforth State) has relied largely on the dissemination of COVIDrelated information via official media channels such as government websites and briefings by the State and Territory leaders. In addition, COVID-related information has been disseminated through the translation of official government sources into different languages, albeit with various levels of success (Dalzell, 2020). Although the virus was largely contained in most states and territories by mid-2020, the State of Victoria experienced a substantial resurgence in July 2020 and restrictions were reimposed. As a result, there was a strict lockdown that lasted 111 days (June 20 - October 26, 2020). During this second wave, early outbreaks of COVID-19 in nine public housing blocks in metropolitan Melbourne saw what has been branded a "hard lockdown" imposed on residents mostly from CALD backgrounds (Fowler & Booker, 2020). It has been suggested that "attempts to communicate the recommendations" of the [Victorian] Chief Medical Officer may not have reached and/or been understood by all CALD community members" (Wild et al., 2020).

Participants

Using a purposive sampling approach, key members were recruited from selected community organizations from the Chinese, Italian and Greek communities. We sought to recruit participants from CALD organizations that provided different services; for example, aged care services, disability services, media organizations, social services or pensioner clubs. Individuals were eligible to participate if they worked at a community organization or acted as a linguistic and cultural mediator on behalf of a CALD community organization. In general, people who work for CALD community organizations share the linguistic and cultural background of the CALD community they serve; they are also likely to identify with the community and be accepted as a member by the community.

Participants were recruited via an email providing an overview of the study and an invitation to take part in an interview. Emails were initially sent out to key members of community organizations known to the researchers and then further distributed to relevant individuals in the organization or community making use of a chain referral strategy (Patton, 1990). There were sixteen participants in total: eleven were female and five were male. None of the contacted participants declined to participate, although several organisations did not return our calls or respond to our email requests. All participants spoke English and were bilingual/multilingual adults aged 18 or over. Table 1 provides an overview of the participants and their roles. No demographic data were collected relating to age or length of time in Australia, in the interests of the participants' confidentiality. Participants were either first or second generation migrants.

Participant	Community	Gender
Chair of a Charity Foundation (CCF)	Chinese	Female
Member of a Social services organization (SS1)	Chinese	Male
Member of a Social services organization (SS2)	Chinese	Male
CEO of community newspaper (CMN)	Greek	Male
Radio producer in community radio (CRP)	Greek	Male
Head of aged & care services provider (ACG)	Greek	Female
Manager of family and community services (FCG)	Greek	Female
PR Communications Officer (PRG)	Greek	Female
CEO disability services provider (DSG)	Greek	Female
Community member (CMG)	Greek	Female
Secretary of a community pensioner's club (SPI)	Italian	Female
Head of aged & care services provider (ACI)	Italian	Female
Treasurer of aged & care services provider (TAI)	Italian	Male
Community member (CMI1)	Italian	Female
Community member (CMI2)	Italian	Female
Community member (CMI3)	Italian	Female

Table 1: Profiles of participants: affiliation and role, pseudonym; community; and gender

Data collection

Data collection was scheduled according to the availability of the participants and took place online between June 2020 and December 2020; that is, during the hard lockdown and after it

had ended in October. We conducted 15 semi-structured interviews lasting between 30 and 80 minutes, involving 16 participants in total. Interview participants were invited to discuss their experiences and perspectives of the processes of COVID-related information mediation and dissemination. The interview outline was developed by the research team, informed by media coverage about communication with CALD communities at the time and emerging research on public-health communication during COVID-19. The main points for discussion were the communities' experience with sourcing or creating COVID-19-related information, whether or not this information was adapted, and how it was disseminated and received by community members (see Appendix 1 for the interview outline).

All interviews were conducted by bilingual members of the research team online via Zoom and were recorded with the participants' consent. In general the interviews commenced inlanguage (e.g. in Greek), with code-switching between languages by both the participants and the bilingual researchers occurring throughout the interviews. As all participants and the bilingual researchers had a high degree of language competence, there were no language barriers present in the interviews. The audio-recorded data were transcribed by Sonix Transcription, which is an automated speech-to-text transcribing platform for English and other languages. The accuracy of the transcriptions was checked by replaying the audio and rectifying any mis-transcriptions. Three of the researchers were native speakers of either Italian, Chinese or Greek, with at least one additional member of the team having proficiency in one of these languages, allowing for cross-checking of the transcriptions. Any participants' non-standard English has been retained in the transcripts. The transcripts were de-identified and organization names have been replaced with generic descriptions and associated acronyms.

Data analysis and rigour

A rigorous thematic analysis was used to examine the participants' experiences pertaining to COVID-related health communication. It enabled the identification, analysis, organization, description, cross-data analysis and reporting of the themes that emerged (Nowell, Norris, White, & Moules, 2017). NVivo 12 software was used to sort and organise the data set. Initial codes were generated inductively to identify meanings and patterns (Braun & Clarke, 2006). This was done by one researcher with the transcripts from the Greek-speaking participants. This list of initial codes was then shared with the research team, who further developed the codes while reviewing the transcripts for the Italian- and Chinese-speaking participants. Iterative reading of the transcripts and application of the codes was undertaken by the three bilingual members of the research team working independently. These three researchers met regularly throughout the coding phase for peer debriefing. The coding was then cross-checked by an additional researcher, with any disagreements resolved by discussion with other team members. The coded data were then sorted into themes (Braun & Clarke, 2006). In this phase, similar processes were applied to ensure the trustworthiness of analysis and the accuracy of the coded themes as a reflection of the meanings evident in the dataset. The peer-debriefing process was beneficial in clarifying certain interpretations and challenging certain assumptions made during the coding process. Undertaking such a peer review enhances the credibility of the research findings (Cutcliffe & McKenna, 1999). Appendix 2 gives an overview of the codes and recurring features developed through the thematic analysis.

Ethics and consent process

This study was reviewed and approved by the University of Melbourne Humanities and Applied Sciences Human Ethics Sub-Committee (2057427.1). Written informed consent was obtained from all participants. Participants were assured that the privacy and confidentiality of the collected information would be maintained at all times.

Findings

Five overarching themes were identified in relation to the reported strategies used by CALD organizations to reach their communities about COVID-19 and their perceptions of how well the COVID-related information was received and understood. These themes were: 1) sourcing of pandemic health information, 2) translation or adaptation of source texts, 3) mediation and dissemination strategies, 4) reception of information, 5) challenges and recommendations for risk and crisis communication.

Sourcing of pandemic health information

This theme relates to sources of information the community organizations relied on as well as to participant perceptions of where community members tended to source the COVID-19 public-health messages. Firstly, all participating organizations reported sourcing COVID-related information from Australian fFederal and State government Department of Health Services and government-supported providers (for example, Extract 1). This included sourcing information from the Victorian State government press conferences, public service broadcasters and other multicultural service providers.

Extract 1: What we are passing on is the message of the Australian government and the Victorian government (Chinese community organization, SS1).

The participant in Extract 1 further provided their rationale for avoiding external sources such as information presented in social media outlets or multi-purpose messaging apps, explaining that information derived from these sources might include value judgements or emotional connotations which were deemed inappropriate:

Extract 2: You may also see the so-called news that WeChat social media platforms might be affected by the Chinese government... Some WeChat accounts might do that. Their articles will be more emotional in order to draw people's attention. Our translations would be more neutral and less emotional. We just tell you what the Australian measures are, in a very truthful way (Chinese community organization, SS1)

Secondly, the strategy of only sourcing government-sponsored COVID-information was reportedly not the case for elderly members of the Chinese and Greek communities. Elderly Chinese people were perceived, according to their community organization representatives, to use the social media app WeChat as their main source of information. By contrast, some elderly people from the Greek community watched Greek news broadcast via satellite directly from Greece (Extract 3):

Extract 3: Sometimes they have the shows running in from Greece. So they may be hearing all the Greek news as well. Not necessarily relevant to Victoria (Greek community organization, ACG).

Translation or adaptation of source texts

Key members of the community organizations described their role as an extended process of information brokering. This involved an activity chain from the original preparation of information in English to multilingual translation and then distribution to and by CALD community organizations. While a Chinese organization reported translating the government texts without modifications (extracts 1-2), other community organizations identified potential issues such as the reliability of government translations (Extract 4) and interpreting (Extract 5), as well as the accessibility of the translation from a literacy perspective (Extracts 6 and 7). They reported adapting these documents to the needs of their respective communities.

Extract 4: And some of the government translations are not very reliable... and even some of the advertisements that the government placed in the newspapers informing the people were not correct and we had to correct it (Greek community organization, CMN).

Extract 5: The hot line [...] is a free interpreting service. But in fact, from our point of view, we have got lots of feedback from our customers concerning the quality of translation, especially the quality of this kind of interpreting service. People are not satisfied (Chinese community organization, SS2).

Extract 6: The translated material is very sort of at a higher level, very formal, very sort of legalese. ... So what we do is actually we revisit the current information and put it in a way that they understand it. Especially when we're speaking to somebody on the phone, we'll put it in a simple language (Greek community organization, CMN).

Extract 7: I think there would be an element of adapting the information because it has to make sense. Sometimes it's not a literal translation... I think we take pride in making sure that it's at a level that can be understood by the consumers (Italian community organization, ACI).

In other contexts, translations were also provided when information was not available in the community language. This was done to facilitate the timely provision of information (Extract 8).

Extract 8: But if there is an official translation, we usually post the official translation on our social media platform directly. But if not, our employees will translate it themselves. But we will add some notes, stating that we are not NAATI-accredited translator, so we have to take this English version as the standard. Our Chinese version is for reference only (Chinese community organization, SS1).

In this extract, the participant refers to Australia's National Accreditation Authority for Translators and Interpreters (NAATI), which provides certification that is required by all translators and interpreters who work for the government and its agencies.

Mediation and dissemination strategies

Key organizations within CALD communities were reportedly tasked with updating their staff, volunteers and members about pandemic health information. Some community organizations provided written material from official governmental sources, while others adopted a multimodal approach. In Extract 9, a participant from an aged and care services

provider for the Greek community outlines their provision and dissemination strategies, including making information available in the community language. They also signal the limitations experienced in reaching the broader community.

Extract 9: We do provide information that is written in their language... I write letters and provide information... But we also follow up with a phone call, but that is also for the thousand who are our clients... It really is the broader community who might have that difficulty (Greek community organization, ACG).

Many participants acknowledged the need to make use of multi-platform distribution methods to deliver pandemic health information. They reporting using email, online websites, social media outlets and messaging apps. As can be seen in Extracts 10-12, these methods were perceived to be the most timely and effective to reach those that were familiar with the digital communication technologies.

Extract 10: So I have been uploading the news onto our Facebook page, our LinkedIn page, as well as our WeChat group (Chinese community organization, CCF).

Extract 11: We upload all the information that we distribute to our customers onto our website (Italian community organization, ACI).

Extract 12: We'll write the information, put it on our logo and then we email it to our clients. (Greek community organization, ACG)

For members of the community, particularly the elderly for whom online content was inaccessible, physical mailouts were the next preferred method of dissemination. However, the participants identified constraints in their capacity to extend this mailout to the wider community they serviced:

Extract 13: I mean, we would actually implement a mail out or communication strategy and keep them updated (Italian community organization, ACI).

Extract 14: But I think overall we've been very, very over resourced in terms of information, but we've been very limited, I think, on how we can get it out there... But it's also a big commitment to be sending out, printing out letters, sending them out to thousands and thousands of people (Greek community organization, ACG).

The Greek community radio broadcasters reported dedicating time to systematically informing their community about government-prescribed preventative measures on to how to keep safe in the midst of the pandemic. In addition to these short segments, longer segments were scheduled for broadcasting government updates pertaining to state-specific measures that were introduced when restrictions were enforced or lifted:

Extract 15: So for the past almost six months, the organization dedicates almost 30 seconds every 20 minutes to share a message from the federal government... saying how to keep yourself safe. And also when there is an important, you know, like step, update that a state or territory is taking, there will be some announcements. So such a program definitely will have an audio like probably like 10 minutes audio dedicated to the announcements (Greek community organization, CRP).

Reception of information

The participants discussed to what extent and in what ways community members understood and responded to the mediated health information they received from different channels. There was general consensus that the majority of the clients served by the organizations listened to, understood and acted upon the information they received. There

was a tendency towards compliance and observance of the requirements and restrictions in place.

Extract 16: I think most of our consumers have understood because and I say that because we had a number of clients who actually, through their own fear, suspended services and preferred not to have anyone coming into the home. So the message about the potential consequences of getting coronavirus was clearly understood (Italian community organization, ACI).

One of the groups that was disproportionately impacted by COVID-19 in Victoria was the Greek community, particularly as a result of a serious outbreak in its own aged care homes. One of the prominent roles of community radio broadcasters and newspapers was to inform the public of the severity of the disease as well as the negative toll it had on their community members in aged care settings. This was instrumental in raising awareness of the necessity to be vigilant and take heed of the government advice and directives.

Extract 17: Yeah, I remember the first name. I mean, the first death of a Greek Australian in [name of aged care provider] that was reported. Until then, we had a lot of people saying that it's a conspiracy.... So when we had his story, his name, his - then people started taking notice (Greek community organization, CMN).

For the three participating language communities, the elderly were reportedly the most vulnerable group, not only because of the effects of the virus but also because they were less likely to access and understand the health information. One of the most frequent reasons put forward for their inability to understand this information was their lack of access to online sources, whether in English or the community language. Participants from the Greek community organization also highlighted the tendency for some elderly community members to be illiterate in both English and Greek.

Extract 18: Our community doesn't particularly access Zoom and online media to be able to just do an email ... For many of them, don't even read in Greek. We have got a cohort who are illiterate in their own language (Greek community organization, ACG).

The challenges pertaining to lack of access to information and the potential inability to read COVID-health information became most prominent during the forced locked down of several public housing towers in Victoria. The following extract details the devastating consequences of not having any access to information in the community language.

Extract 19: When the public housing towers in northern Melbourne were locked down, there were many lockdown measures. I made some check-in calls with our clients at that time to see whether there were living in those buildings. We have a couple of elderly people who also lived in one of the public housing towers. But their apartment did not on the lockdown list. But they didn't know. They thought their own building was also locked down, so he didn't come out at all. ... I think they has no information sources at all. They had no idea what was going on (Chinese community organization, SS1).

Challenges and lessons learnt around risk and crisis communication

The onset and rapid spread of the virus necessitated the preparation, adaptation and dissemination of information in English and community languages in a very short time frame. During the implementation of this multilingual response, several challenges arose that hampered the efforts of CALD community organizations to provide pandemic-health information to their community members. Participants raised concerns over the quantity of incoming information from government sources, indicating that information overload presented a challenge: at times keeping abreast of the changing information and constantly

informing community members of the updates from the government were overwhelming tasks. A related issue was the challenge of providing information in a timely manner when updates during public press releases were not provided in community languages.

Extract 20: Can I just say, you know, staying on top of the information, making sure that all the information we have is current and accurate, that's also been a challenge (Italian community organization, ACI).

Extract 21: For example, the governor's [Victorian Premier's] press releases will not be officially translated. Some of them are not translated. If the governor suddenly announce that the lockdown will end, this kind of information will not have a Chinese version simultaneously (Chinese community organization, SS1)-

Participants from the Chinese and Greek community organizations mentioned lack of funding and limited resources as presenting barriers to the timely dissemination of information to the elderly in the community. One of the factors contributing to issues surrounding funding was that the more established communities were not receiving the kind of financial assistance that more recently arrived communities were perceived to receive.

Extract 22: We have a limited database. We basically use our network and also our funding recipients, our supporters and our members. ... it's only recently we have been more visible in the public arena, but before it was more restricted to our own community. But now we are a little bit more expand to the mainstream community. So I think to reach out to those people, it takes time (Chinese community organization, CCF).

As a response to these challenges, the participants made recommendations that could better streamline the information brokering so as to reach non-English-speaking communities with timely and accessible information. It was unequivocally suggested that simplicity, clarity and condensing information would facilitate this process.

Extract 23: I think that repetition is always good and keep reminding people and and also rewarding people by saying that what they're doing is good. ...repetition and simple, simple messages (Italian community organization, TAI).

The participants recommended the government allocate additional resources to community organizations for the employment of additional bilingual workers to communicate important information, given that the elderly may not be able to access the information in the available channels. The Greek and Chinese communities saw the need for the government to consider adopting a multiplatform approach to the dissemination of COVID-related health information to the elderly. This could involve direct mailouts of language-specific information resources. It was deemed that this would relieve the pressure from the community organizations catering for the literacy needs of this cohort.

Extract 24: So I think if more resources can be invested towards social organizations like ours, and then we can play a mediation role, including hiring more bilingual workers to communicate with communities, I think this may be more practical to solve the problem (Chinese community organization, SS1).

Discussion

Our findings suggest that the provision of mediated health information about COVID-19 by CALD community organizations plays a key role in reducing the vulnerability and enhancing the resilience of CALD communities. If communities are not targeted appropriately, public health directives and advice may not address cultural or linguistic barriers adequately. With this in mind, we analyze the extended information brokering from the creation of health information in English to multilingual transformation and then to distribution to and by CALD community organizations. Along this continuum, participating organizations and community

members identified certain challenges that occur with respect to the sourcing, translating or adapting and dissemination of pandemic health information.

Sourcing of pandemic health information

Community organizations in the majority took information from government sources as these were deemed to be more reliable and trustworthy - this follows previous studies that qualified information from WHO and national health boards as being "true" information (Glasdam & Stjernswärd, 2020). There was growing concern, however, over the observed trend of some community members, particularly the elderly, to access information from unofficial sources, including social media platforms or television broadcasters from their home country. As a result, the information they were receiving was not necessarily accurate or relevant to their particular context. In response to these information-seeking behaviours, which have been observed more widely, the term 'infodemic' has been coined to highlight the dangers of misinformation (wrong, misleading information) and disinformation (the dissemination of deliberately false information) (Stahl, 2006; WHO, 2020b) during crisis or emergency situations such as disease outbreaks, terrorist attacks, or natural disasters (Domenico, Sit, Ishizaka, & Nunan, 2021; Mendoza, Poblete, & Castillo, 2010; Starbird, Maddock, Orand, Achterman, & Mason, 2014). The case of the COVID-19 pandemic highlights the impact of sourcing information from questionable sources as it may influence people's behaviour and hamper the effectiveness of government responses and the countermeasures deployed (Cinelli et al., 2020).

Translation, adaptation and dissemination

The pandemic has brought with it an awareness that multilingual messaging is essential to ensure compliance with public health directives and to assist in stemming the spread of the virus (Ahmad, 2020; Arora & Grey, 2020; Piller, Zhang, & Li, 2020). In line with this, there was a general acknowledgement amongst the participants of the state and federal governments' efforts in investing funds and resources in the translation of COVID-health related material into community languages. However, some of the communities questioned the quality of translations, expressing their concern about the accuracy of some of the documents created. This concern was similarly addressed by the media when in August 2020, the national broadcaster, the ABC, reported "nonsensical" and "laughable" translations of COVID-19 related public health messages had been disseminated to multicultural communities in Victoria (Dalzell, 2020). These cases concerned the mixing of languages in documents, indicating a project-management problem and lack of review rather than the employment of sub-standard translators.

O'Brien, Federici, Cadwell, Marlowe and Gerber (2018) suggest that the quality of multilingual crisis communication can be evaluated along the following four dimensions:

- 1. Availability: ensuring translated information is made available; is it recognised as an essential product and service?
- 2. Accessibility: if translation is 'available', is it accessible, i.e. free, delivered on multiple platforms, in multiple modes, in all relevant languages?

- 3. Acceptability: ensuring that the provision of translation is acceptable, i.e. are provisions put in place to ensure accuracy and appropriateness of information?
- 4. Adaptability: can the provision of translation be adapted to different scenarios, for example, fluid language requirements, literacies, technological demands, new modes of delivery, diverse hazards and movement of peoples? (p. 628)

Comparing this framework to our participants' responses, what becomes evident, first, is that there are provisions on the national and state levels for translation as a service and a product. Second, in terms of accessibility, translated content is free and made available on wide range of platforms including radio, social media, and governmental websites, as well as being translated into as many as 63 of the 263 CALD languages spoken in Victoria. What is lacking is the provision of translated content in simplified language or easy-read formats so as to meet the needs of community members who have limited language or technical proficiency in the target/community language or to cater for the needs of people with a disability or cognitive impairment. The use of plain language, non-technical terminology, particularly "concrete, short action statements" (Barton et al., 2018, p. 76) and the inclusion of appropriate visual material can benefit individuals with limited literacy to understand what their behaviours should be and what steps to follow in order to improve their health (Batterham, Hawkins, Collins, Buchbinder, & Osborne, 2016).

Third, the task of determining the acceptability of translated content, particularly with respect to accuracy and cultural appropriateness, is largely unofficially delegated to community organizations, which independently assume this role and adapt translations in order to improve text quality or to meet the literacy requirements of their members. This tailoring of translation and health messaging via the contexualisation of the message by CALD organisations is also attested by Wild et al., (2021). Finally, it does not appear at present that official provisions are in place to ensure that translated health content can easily be adapted in the context of shifting requirements. For example, in the early stages of the pandemic, technologies such as machine translation, most commonly Google Translate, were deployed to assist with translation. However, in the absence of post-editing by humans, the translation output was reportedly of low quality (Dalzell 2020). The overreliance on digital materials has also contributed to more vulnerable populations and more specifically the elderly being unable to access health directives and advice, as physical mailouts are not carried out by official governmental bodies. The findings from our study have reiterated the well-attested notion that migrants and refugees in Australia are not homogenous and have varying levels digital literacy and access. Migliorino (2011) estimates that 1 in 5 older Australians over the age of 65 from migrant backgrounds are impacted by limited digital literacy and limited affordability to access information communication technology (ICT). However, studies of seniors have also shown that some older Australians tend to be active users of ICT (Martinez-Pecino, Lera, & Martinez, 2012). This goes some way to explaining the CALD communities' variable use of technology and social media. Our interviewees generally recommended the use of multiplatform content distribution methods to facilitate the dissemination of pandemic health information.

Reception of information

Fischer (2008) notes that "[a]ll too often emergency personnel assume that because the information was disseminated, the intended recipients have received it, understood it, and responded to it in the desired fashion" (p. 217). It is not a given that community members will listen to, understand, and act upon pandemic health information they receive in this linear fashion. Other variables come into play that impact on comprehension and reception of information. The elderly are less likely to have access to digital resources in either the dominant language or their community language and a segment of this population may not be literate in either language. This contributes to their inability to comprehend health messages. Past experiences have highlighted the negative consequences that may arise when reception of emergency or health information fails. Field (2017) details the reasons underlying the failure of residents to evacuate appropriate regions before the landfall of Super Typhoon Yolanda in the Philippines. One of the these was a lack of appropriate translation based on local cultural needs as the typhoon was referred to as a "storm surge" rather than a "tsunami or a destructive wave". Field explains that "while the two are scientifically different phenomena, it was acknowledged that had the threat of the storm surge been likened to that of a tsunami... coastal regions would have seen higher evacuation rates, particularly due to familiarity with the 2004 Indian Ocean tsunami and the more recent 2011 tsunami in Japan" (Field, 2017, p. 341). In the context of COVID-19, the consequences of not understanding official advice due to the use of convoluted terms, for example the distinction between "isolation" and "guarantine", resulted in community members unwittingly spreading the virus (ABC News, 2020) or elderly community members complying, as we have seen, with isolation restrictions that did not apply to them.

Conclusions

In light of the challenges presented by the onset of the novel coronavirus and the rapid implementation of the government-led multilingual response, the participating communities recommended the following actions to facilitate future crisis-communication procedures:

- 1. Having strategies in place to deal with information overload so that community organizations are better equipped to adapt and disseminate constantly changing information.
- 2. Having provisions in place to allow for the timely translation of official televised broadcasts such as premiers' press releases, as they were not initially officially translated in community languages.
- 3. Making the location of community translations transparent and readily accessible on government health websites.
- 4. Extending funding for established migrant communities so as to support their efforts to reach members of the community through non-digital modes of communication.
- 5. Adopting a multimodal approach to the dissemination of COVID-related health information to vulnerable populations such as elder CALD community members.

These recommendations are in line with the Australian Government's *Multicultural Access* and *Equity Policy Guide*, which acknowledges that government departments and government-subsidised agencies have an obligation to provide "a range of communication

techniques to engage with clients from different backgrounds, including the use of information in languages other than English, plain English and blended information delivery methods (e.g. print, online, face-to-face" (Commonwealth of Australia, 2018, p. 10).

This study has limitations. Our findings are based on the perspectives of members of CALD community organizations about the efficacy of COVID-19 messaging for CALD people. Future studies should seek to monitor the uptake of information, comprehension and impact from a broader range of stakeholders, including CALD people themselves. Our findings reflect the experiences of representatives from three large CALD communities in Melbourne, which are well-established and are likely to have good infrastructure and networks. Future studies should focus on more recent arrivals, including refugee communities, which are likely to be less well resourced and thus more vulnerable.

References

ABC News. (2020, October). 'Confusion' led to boy with virus going to school, sending hundreds into isolation. https://www.abc.net.au/news/2020-10-22/victoria-records-5-coronavirus-cases-0-deaths/12800986

Ahmad, R. (2020, April). Multilingual resources key to fighting COVID-19. *Language on the Move*. https://www.languageonthemove.com/multilingual-resources-key-to-fighting-covid-19/

Arora, T., & Grey, I. (2020). Health behaviour changes during COVID-19 and the potential consequences: A mini-review. *Journal of Health Psychology*, *25*(9), 1155–1163. https://doi.org/10.1177/1359105320937053

Ataguba, O. A., & Ataguba, J. E. (2020). Social determinants of health: The role of effective communication in the COVID-19 pandemic in developing countries. *Global Health Action*, *13*(1), 1788263. https://doi.org/10.1080/16549716.2020.1788263

Barton, A. J., Allen, P. E., Boyle, D. K., Loan, L. A., Stichler, J. F., & Parnell, T. A. (2018). Health literacy: Essential for a culture of health. *The Journal of Continuing Education in Nursing*, *49*(2), 73–78. https://doi.org/10.3928/00220124-20180116-06

Batterham, R. W., Hawkins, M., Collins, P. A., Buchbinder, R., & Osborne, R. H. (2016). Health literacy: Applying current concepts to improve health services and reduce health inequalities. *Public Health*, *132*, 3–12. https://doi.org/10.1016/j.puhe.2016.01.001

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Cadwell, P. (2014). Translation and interpreting needs in the Great East Japan Earthquake of 2011. *Man versus Machine: Proceedings of the XXth FIT World Congress.* 2, 752–760.

Caelli, K., Ray, L., & Mill, J. (2003). 'Clear as mud': Toward greater clarity in generic qualitative research. *International Journal of Qualitative Methods*, 2(2), 1–13. https://doi.org/10.1177/160940690300200201

Cinelli, M., Quattrociocchi, W., Galeazzi, A., Valensise, C. M., Brugnoli, E., Schmidt, A. L., Zola, P., Zollo, F., & Scala, A. (2020). The COVID-19 social media infodemic. *Scientific Reports*, *10*(1), 16598. https://doi.org/10.1038/s41598-020-73510-5

Commonwealth of Australia. (2018). *The Multicultural Access and Equity Policy Guide*. https://www.homeaffairs.gov.au/mca/PDFs/multicultural-access-equity-policy-guide.pdf

Cutcliffe, J. R., & McKenna, H. P. (1999). Establishing the credibility of qualitative research findings: The plot thickens. *Journal of Advanced Nursing*, *30*(2), 374–380. https://doi.org/10.1046/j.1365-2648.1999.01090.x

Dalzell, S. (2020, August). 'Nonsense' translations of coronavirus messages distributed by governments. ABC News. https://www.abc.net.au/news/2020-08-13/coronavirus-messages-translated-to-nonsense-in-other-languages/12550520

Domenico, G. D., Sit, J., Ishizaka, A., & Nunan, D. (2021). Fake news, social media and marketing: A systematic review. *Journal of Business Research*, 124, 329–341. https://doi.org/10.1016/j.jbusres.2020.11.037

Doody, O., & Noonan, M. (2013). Preparing and conducting interviews to collect data. *Nurse Researcher*, 20(5), 28–32. https://doi.org/10.7748/nr2013.05.20.5.28.e327

Field, J. (2017). What is appropriate and relevant assistance after a disaster? Accounting for culture(s) in the response to Typhoon Haiyan/Yolanda. *International Journal of Disaster Risk Reduction*, *22*, 335–344. https://doi.org/10.1016/j.ijdrr.2017.02.010

Finset, A., Bosworth, H., Butow, P., Gulbrandsen, P., Hulsman, R. L., Pieterse, A. H., Street, R., Tschoetschel, R., & van Weert, J. (2020). Effective health communication – a key factor in fighting the COVID-19 pandemic. *Patient Education and Counseling*, *103*(5), 873–876. https://doi.org/10.1016/j.pec.2020.03.027

Fischer, H. W. (2008). *Response to disaster: Fact versus fiction and its perpetuation: the sociology of disaster* (3rd ed). University Press of America.

Fowler, M., & Booker, C. (2020). Coronavirus Australia: Lockdown imposed on North Melbourne, Flemington public housing towers sparks anger from residents. The Age.

https://www.theage.com.au/national/victoria/covid-public-housing-wrap-20200705-p5596z.html

Freimuth, V. S., & Quinn, S. C. (2004). The Contributions of Health Communication to Eliminating Health Disparities. *American Journal of Public Health*, *94*(12), 2053–2055. https://doi.org/10.2105/AJPH.94.12.2053

Glasdam, S., & Stjernswärd, S. (2020). Information about the COVID-19 pandemic – A thematic analysis of different ways of perceiving true and untrue information. *Social Sciences & Humanities Open*, *2*(1), 100090. https://doi.org/10.1016/j.ssaho.2020.100090

Glik, D. C. (2007). Risk Communication for Public Health Emergencies. *Annual Review of Public Health*, 28(1), 33–54. https://doi.org/10.1146/annurev.publhealth.28.021406.144123

Henderson, S., & Kendall, E. (2011). 'Community navigators': Making a difference by promoting health in culturally and linguistically diverse (CALD) communities in Logan, Queensland. *Australian Journal of Primary Health*, *17*(4), 347. https://doi.org/10.1071/PY11053

Henrich, N., & Holmes, B. (2011). What the Public Was Saying about the H1N1 Vaccine: Perceptions and Issues Discussed in On-Line Comments during the 2009 H1N1 Pandemic. *PLoS ONE*, *6*(4), e18479. https://doi.org/10.1371/journal.pone.0018479

Hsieh, E., & Kramer, E. M. (2021). *Rethinking culture in health communication: Social interactions as intercultural encounters*. John Wiley & Sons.

Hughson, J., Woodward-Kron, R., Parker, A., Hajek, J., Bresin, A., Knoch, U., Phan, T., & Story, D. (2016). A review of approaches to improve participation of culturally and linguistically diverse populations in clinical trials. *Trials*, *17*(1). https://doi.org/10.1186/s13063-016-1384-3

Hugo, G. (2007). Recent trends in Chinese migration to Australia. *Workshop on Chinese in the Pacific: Where to Now?* http://chl-old.anu.edu.au/publications/csds/chinese_pacific_abstracts.pdf

Kain, N. A., & Jardine, C. G. (2020). 'Keep It Short and Sweet': Improving Risk Communication to Family Physicians During Public Health Crises. *Canadian family physician*, *66*(3), e99–e106

Kelly, M. P., & Barker, M. (2016). Why is changing health-related behaviour so difficult? *Public Health*, *136*, 109–116. https://doi.org/10.1016/j.puhe.2016.03.030

Kickbusch, I. (1999). Global + local = glocal public health. *Journal of Epidemiology & Community Health*, 53(8), 451–452. https://doi.org/10.1136/jech.53.8.451

Kim, D. K. D., & Kreps, G. L. (2020). An Analysis of Government Communication in the United States During the COVID-19 Pandemic: Recommendations for Effective Government Health Risk Communication. *World Medical & Health Policy*, *12*(4), 398–412. https://doi.org/10.1002/wmh3.363

Lowbridge, C. P., & Leask, J. (2011). Bug Breakfast in the Bulletin: Risk communication in public health. *New South Wales Public Health Bulletin*, 22(2), 34. https://doi.org/10.1071/NB10055

Lundgren, R. E., & McMakin, A. H. (2018). *Risk Communication A Handbook for Communicating Environmental, Safety, and Health Risks*. https://nbn-resolving.org/urn:nbn:de:101:1-2018080804355041270690

Marlowe, J. (2019). Transnational crisis translation: Social media and forced migration. *Disaster Prevention and Management: An International Journal*, *29*(2), 200–213. https://doi.org/10.1108/DPM-11-2018-0368

Martinez-Pecino, R., Lera, M. J., & Martinez-Pecino, M. (2012). Active seniors and mobile phone interaction. *Social Behavior and Personality: An International Journal*, *40*(5), 875–880. https://doi.org/10.2224/sbp.2012.40.5.875

Mendoza, M., Poblete, B., & Castillo, C. (2010). Twitter under crisis: Can we trust what we RT? *Proceedings of the First Workshop on Social Media Analytics - SOMA '10*, 71–79. https://doi.org/10.1145/1964858.1964869

Merriam, S. B., & Merriam, S. B. (1998). *Qualitative research and case study applications in education* (2nd ed). Jossey-Bass Publishers.

Migliorino, P. (2011). Digital technologies can unite but also divide: Cald communities in the digital age. *Australasian Public Libraries and Information Services*, *24*(3), 107–110. https://doi.org/10.3316/ielapa.358288699747814

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, *16*(1), 160940691773384. https://doi.org/10.1177/1609406917733847

O'Brien, S., Cadwell, P., & Zajdel, A. (2021). *Communicating COVID-19: Translation and trust in Ireland's response to the pandemic*. School of Applied Language and Intercultural Studies, Dublin City University. https://protect-au.mimecast.com/s/OYBkC71ZQzSAvyQOMH8VUlo?domain=dcu.ie

O'Brien, S., Federici, F., Cadwell, P., Marlowe, J., & Gerber, B. (2018). Language translation during disaster: A comparative analysis of five national approaches. *International Journal of Disaster Risk Reduction*, *31*, 627–636. https://doi.org/10.1016/j.ijdrr.2018.07.006

Paternotte, E., van Dulmen, S., van der Lee, N., Scherpbier, A. J. J. A., & Scheele, F. (2015). Factors influencing intercultural doctor–patient communication: A realist review. *Patient Education and Counseling*, *98*(4), 420–445. https://doi.org/10.1016/j.pec.2014.11.018

Patton, M. Q. (1990). Qualitative evaluation and research methods, 2nd ed. (p. 532). Sage Publications, Inc.

Piller, I., Zhang, J., & Li, J. (2020). Linguistic diversity in a time of crisis: Language challenges of the COVID-19 pandemic. *Multilingua*, *39*(5), 503–515. https://doi.org/10.1515/multi-2020-0136

Renaldi, E. (2021, April 5). '*My father was pissed off with me': How conflicting information about COVID-19 is tearing families apart*. ABC News. https://www.abc.net.au/news/2021-04-06/families-divided-over-covid-coronavirus-misinformation/100038156

Schouten, B. C., & Meeuwesen, L. (2006). Cultural differences in medical communication: A review of the literature. *Patient Education and Counseling*, 64(1–3), 21–34. https://doi.org/10.1016/j.pec.2005.11.014

Schouten, B. C., Cox, A., Duran, G., Kerremans, K., Banning, L. K., Lahdidioui, A., van den Muijsenbergh, M., Schinkel, S., Sungur, H., Suurmond, J., Zendedel, R., & Krystallidou, D. (2020). Mitigating language and cultural barriers in healthcare communication: Toward a holistic approach. *Patient Education and Counseling*, *103*(12), 2604–2608. https://doi.org/10.1016/j.pec.2020.05.001

Siddique, H. (2020, October). *UK ministers accused over impact of Covid on minorities and disabled people*. The Guardian. http://www.theguardian.com/world/2020/oct/19/uk-ministers-accused-over-impact-of-covid-on-minorities-and-disabled-people

Smith, J. A., & Judd, J. (2020). COVID-19: Vulnerability and the power of privilege in a pandemic. *Health Promotion Journal of Australia*, *31*(2), 158–160. https://doi.org/10.1002/hpja.333

Stahl, B. C. (2006). On the difference or equality of information, misinformation, and disinformation: A critical research perspective. *Informing Science*, *9*, 83–96.

Starbird, K., Maddock, J., Orand, M., Achterman, P., & Mason, R. M. (2014). Rumors, false flags, and digital vigilantes: Misinformation on Twitter after the 2013 Boston Marathon bombing. *IConference 2014 Proceedings*. https://doi.org/10.9776/14308

Sullivan-Bolyai, S., Bova, C., & Harper, D. (2005). Developing and refining interventions in persons with health disparities: The use of qualitative description. *Nursing Outlook*, *53*(3), 127–133. https://doi.org/10.1016/j.outlook.2005.03.005

van Houwelingen, C. T., Ettema, R. G., Antonietti, M. G., & Kort, H. S. (2018). Understanding older people's readiness for receiving Telehealth: Mixed-method study. *J Med Internet Res, 20*(4), e123. https://doi.org/10.2196/jmir.8407

Wild, A., Kunstler, B., Goodwin, D., Onyala, S., Zhang, L., Kufi, M., Salim, W., Musse, F., Mohideen, M., Asthana, M., Al-Khafaji, M., Geronimo, M. A., Coase, D., Chew, E., Micallef, E., & Skouteris, H. (2020). Communicating COVID-19 health information to culturally and linguistically diverse communities: Insights from a participatory research collaboration. *Public Health Research & Practice*. *31*(10). https://doi.org/10.17061/phrp3112105

Woodward-Kron, R., & Story, D. (2020). Intercultural communication and safe, effective healthcare for all. *Future Leaders Communiqué*, *5*(3), 11–13.

World Health Organisation. (2020a). WHO Director-General's opening remarks at the media briefing on COVID-19—11 March 2020. https://www.who.int/director-general/speeches/detail/who-director-general-s-openingremarks-at-the-media-briefing-on-covid-19---11-march-2020

World Health Organisation. (2020b). *1st WHO Infodemiology Conference*. WHO. https://www.who.int/news-room/events/detail/2020/06/30/default-calendar/1st-who-infodemiology-conference

World Health Organisation. (2021). Promoting the health of refugees and migrants. 13.

Zarocostas, J. (2020). How to fight an infodemic. *The Lancet, 395*(10225), 676. <u>https://doi.org/10.1016/S0140-6736(20)30461-X</u>

Endnotes

ⁱ Culturally and linguistically diverse (CALD) is a term used primarily in Australian and New Zealand contexts to describe those who were born overseas, speak languages other than the official national languages and/or have lower proficiency of native or national languages, and/ or who have parents who were born overseas.

Appendix 1 Focus Group / Interview Guidelines

MEDIATORS

- **1.** Please, tell us about your current job/role, socio-linguistic background and proficiency in English
- 2. What information have you received in your language regarding the COVID pandemic?
- 3. How and where have you received COVID-19 information?
- **4.** How satisfied are you with the frequency of updates in your language about the COVID-19 pandemic? Why?
- **5.** Is the information easy to access? Please rate your level of satisfaction with the accessibility of the information
- **6.** How satisfied are you with the coverage in your language of the Covid-19 pandemic? Have you received enough information?
- 7. How satisfied are you with the clarity of the information received? Why?
- 8. How much do you trust the information you have received? Why?

ORGANIZATIONS

- 1. What organization do you work with or for?
- **2.** What type of COVID-19 related information and services do you provide to your target community/communities?
- 3. Where is COVID-19 related information disseminated?
- 4. Where does COVID-19 related information come from?
- 5. How often is the information updated?
- **6.** How does your organization provide COVID-related information to your target community/communities? (e.g. newspapers, social media, etc.)
- **7.** Is your organization involved in the translation of COVID-19 related information into community languages? What are the primary sources of the material to translate and who does the translations?
- **8.** Have you adapted COVID-19 related information for vulnerable communities? If yes, what mediation strategies did you employ (e.g. certified translators, ad-hoc translators, family members)?
- **9.** Based on your experience, do communities understand the information they receive? Do they change their behaviour accordingly? [if mentioned, explore issues of trust regarding the translated information and the strategies that organizations use to build trust with their communities]
- **10.** What has your organization done well in terms of providing and disseminating COVID-related information?
- **11.** What challenges has your organization encountered in providing and disseminating COVID-related information? What can be improved in the future?
- 12. Based on your experience, what other information do community members ask for?

Questions if issues of trust are mentioned during the interview/focus group

- 1. Have you encountered any problems with the translated material you have received?
- 2. What kind of problems?
- **3.** Do community members understand?
- **4.** Do community members change their behaviour? Not Questions 5 and 6
- **5.** In your opinion, has the translated material been received well by the community/communities you work with? (Have there been cases of distrust?)
- **6.** Do your communities trust the translated information they receive? What strategies do you use to build this trust? What are the advantages and disadvantages (if any) of the strategies that you have employed?

Appendix 2 Coding typology for recurring features in the interview

Coding categories	Recurring features	
Background and services	COVID-related information & services cooperation between the government & the organization	
Reception of information	cultural difference	
	feedback from target reader	
	understanding information & acting upon it- reception of government	
	translations	
	the elderly's reception	
Dissemination	sources	
	challenges & strategies	
	frequency of updates	
	engaging with the elderly	
Translation	mediation strategies	
	quality of translations	
	translation sources and credibility	
Recommendations	suggestions for governments	
	what was done well	
	challenges encountered	
	how to improve communication	

QUALITATIVE HEALTH COMMUNICATION VOLUME 1, ISSUE 1, 2022