

# Understanding vulnerability to inform two-way inclusive COVID-19 communication

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## Abstract

As a global pandemic, COVID-19 has resulted in a variety of different epidemiological, cultural, political, and socio-economic impacts. However, similar to other disasters, COVID-19 is disproportionately impacting particular groups, including vulnerable populations. In this paper, the authors examine how there is a need to understand the concept of vulnerability and the information needs of vulnerable individuals, groups and communities through an intersectional lens in order to develop inclusive communication that is accessible to different groups. Two-way communication and ongoing interaction are a necessary step in ensuring that vulnerable groups are not excluded from COVID-19 communication practices, potentially further increasing their vulnerability.

Keywords: COVID-19 pandemic, inclusive risk communication, vulnerability, dialogue, intersectionality, risk

Since its emergence in 2019, COVID-19 has become a topic of daily conversation due to its wide-scale impact on all areas of our lives. COVID-19 has not only resulted in the loss of over 3.9 million lives globally as of 28 June 2021 (WHO, 28 June 2021), but has resulted in a multitude of epidemiological, cultural, political, and socio-economic impacts. However, not all segments of society have been impacted equally. We are witnessing differential impacts based on factors such as age, gender, ethnicity, health status and socio-economic status. These differential impacts are in part a result of structural conditions and pre-existing inequalities that have made particular groups more vulnerable not only in relation to the risk of catching the virus, but also the impacts of different response measures being implemented.

Communication has a critical role to play in managing and responding to disasters and is at the core of the response to the COVID-19 pandemic. It provides different stakeholders with information on the response measures being implemented and the different actions that individuals and communities can take to prevent the spread of infection and reduce their risk. Before COVID-19 vaccines were widely available, the response of many governments focused predominantly on their communications policy

and communicating the recommended measures (Fakhrudin, Blanchard & Ragupathy, 2020). Communication is continuing to play a key role as vaccines are being rolled out internationally. However, it is increasingly apparent that different communication approaches are required to communicate effectively and engage with different groups. Not all groups have the same information needs and they therefore require tailored approaches. For example, in response to vaccine hesitancy and thus lower vaccination rates among Black, Asian and Minority Ethnic (BAME) groups in the UK, a number of different, targeted initiatives have been enacted to address the related issues (Mohdin, 2021). Understanding a communication's target audience and their vulnerabilities is critical to be able to identify their information needs, and design effective and inclusive risk communication.

This article first examines the concept of vulnerability in the context of disaster management, before focusing on vulnerability in the context of the COVID-19 pandemic. It then examines why understanding vulnerability is critical to developing inclusive communication to ensure that groups are not excluded from COVID-19 conversations, which could potentially further increase their vulnerability.

## Examining vulnerability in the context of disaster management

Vulnerability is at the core of defining and understanding what is meant by the terms “disaster” and “disaster risk”. The United Nations Office for Disaster Risk Reduction (no date) defines vulnerability as the

*“conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards”.*

It is the interaction between hazardous events that results in serious disruption to how communities and society function, and the conditions of exposure, vulnerability and capacity that results in a disaster (ibid). As a consequence, disasters do not impact everyone equally. Existing vulnerabilities, caused by structural conditions and pre-existing inequalities, result in differential human, social, and economic losses and impacts of a disaster. As such, vulnerable groups in a society are those that are disproportionately affected by a disaster (Howard et al., 2017).

In the disaster management field, research has been undertaken to identify and understand vulnerable groups across all disaster management phases. Social factors that have been identified as influencing people’s vulnerabilities include “class, race, caste, ethnicity, gender, age, poverty, disability, and immigration status” (Bolin & Kurtz, 2018, 184). Vulnerable individuals, groups and communities will typically have diverse needs, expectations, and access to information and technologies that require multiple unique methods of communicating information that addresses these needs (Howard et al., 2017). Different vulnerabilities can also act as a barrier to being targeted with or having access to disaster-related information. For example, in relation to disaster preparedness, demographic characteristics such as gender and ethnicity have been identified as acting to limit some groups’ involvement in disaster planning (Ashraf & Azad, 2015; Andrulis et al., 2011). Mirza Ali Ashraf and Abul Kalam Azad (2015) highlight how in Bangladesh, women from rural areas are rarely included in the planning or preparation of disaster plans. A California (US) based study identified different

barriers to preparing diverse communities for disasters, including socio-economic factors, a lack of support for culturally and linguistically appropriate services and programmes, and limited knowledge about diverse communities (Andrulis et al., 2011). Thus, disparities exist in terms of how different groups are targeted with preparedness practices with some groups being excluded. Based on research conducted with government representatives and Non-Governmental Organisations in seven countries (Belgium, Denmark, Germany, Iceland, Japan, Sweden, the United Kingdom), Susan Anson (2015) found that the majority of countries participating in the study do not prepare their public equally for mass evacuation resulting in “exclusionary [preparedness] practices”. The use of exclusionary practices and not preparing the public equally can increase the vulnerability of non-targeted groups (ibid). As outlined by Howard et al. (2017),

*“vulnerable or ‘at risk’ groups are likely to be less prepared for a natural disaster, more susceptible during it, have higher mortality rates, and poorer outcomes in the recovery period.” (140)*

However, vulnerability is not a fixed characteristic of an individual or a group. It could be associated with a temporary lack of physical security, and the ability to recover from disaster events depends on access to social or economic capital. There are some individuals and groups who are highly and permanently vulnerable to many hazards. For instance, vulnerability is exacerbated in ageing, and frailty in ageing is characterised by physical immobility, cognitive impairments and sensory changes, leading to complex social and healthcare dependencies. With advancing age, older adults are also exposed to chronic health conditions. If disaster relief operations and the provision of health care are adversely affected or overlooked, a lack of access to treatments leads to enhanced risks for this population (Berariu et al., 2015). Recent global disasters have highlighted a disproportionate impact on the ageing population. For example, the earthquake and tsunami in Tohoku (Japan) in 2011 reported 57% of deaths were people aged 65+ (Nakahar & Ichikawa, 2013), Typhoon Haiyan in the Philippines in 2013 reported 39% of all fatalities were aged 60+ (Kulcsar, 2013) and 29% of deaths in the earthquake in Nepal 2015 were of people

aged 60+ (Adhikari et al., 2020). Furthermore, older females are at increased risk compared to males due to longer life expectancies, increasing their risk of poor psychosocial outcomes, such as loneliness, loss or bereavement, risk of trauma and depression. Not all older adults are more vulnerable than younger adults, as advancing ageing also brings rich life experience and wisdom. As such, consideration of the differential needs and challenges faced by older people should be informed by older adult advocates. The engagement of older adults, in particular women, is central to appropriate emergency management planning and response for this population (United Nations Department of Economic and Social Affairs, 2019). However, there are additional factors, in addition to age and gender, that influence the vulnerability of individuals and communities to disaster impacts. For example, racial and class disparities were highlighted during Hurricane Katrina, with evacuation orders being less likely to reach, be trusted and followed by persons of colour and lower-income residents in New Orleans than more affluent and white residents (Bolin & Kurtz, 2018). Factors such as age, gender, race, socio-economic status, disability and education have been classed as indicators of social vulnerability (Farin Fatemi et al., 2017). This perspective of vulnerability focuses on socioeconomic and demographic factors that make people vulnerable due to social structure (McEntire, Gilmore Croker, & Peters, 2010). While social vulnerability of a particular geographic area may be estimated before a disaster occurs, a disaster may result in new vulnerabilities as we are witnessing in the response to COVID-19 (The Lancet, 2020).

The above example of older females being at greater risk compared to males also highlights how vulnerabilities do not exist in isolation. The concept of intersectionality offers a useful lens for untangling the understanding of where individuals and communities are situated on a gradient of vulnerability. Developed by the scholar Kimberlé Crenshaw (1989), the concept of intersectionality moves away from viewing communities as monolithic and homogenous blocks, and towards an appreciation of how characteristics (such as class, gender and race, among others) intersect to sculpt the dynamics of power and inequality. Where vulnerability is understood as the output value of the severity of the threat, the individual's baseline resilience

and the ability to adopt coping measures (i.e., to circumvent the impacts of the harm), (IFRC, no date) intersectionality can be understood as a method to gain a better understanding of these input factors.

Understanding different vulnerabilities, and how they intersect, is a critical step in examining and mitigating the different barriers to groups being able to access, receive and understand risk communication. The Sendai Framework for Disaster Risk Reduction 2015-2030 (United Nations, 2015) highlights how disaster risk reduction practices need to be inclusive and accessible to be efficient and effective. As examined in the following sections, COVID-19 is disproportionately impacting vulnerable groups. Aaron Clark-Ginsberg and Elizabeth L. Petrun Sayers (2020) argue that it is vulnerable groups who will likely be impacted most by COVID-19 information insufficiency and misinformation. The authors of this paper outline below how two-way communication is necessary to develop accessible and inclusive communication that addresses the information needs of different groups, including vulnerable groups.

### **Vulnerability in relation to COVID-19**

Much of the language around COVID-19 is anchored around "risk", namely through public health campaigns and public media concerning the risks of catching or spreading the virus. Medical and governmental authorities have provided individuals with extensive guidance regarding those considered at risk which is often related to underlying medical conditions and old age. However, as society comes to acknowledge the sheer scale of the impacts of the COVID-19 pandemic on society – whether epidemiological, cultural, political or socio-economic – they must finetune their understanding of how these risks are magnified by vulnerability and where they intersect (Hankivsky & Kapilashrami, 2020).

COVID-19 has exacerbated existing inequalities and vulnerabilities within society. The distribution of harm is determined by these existing vulnerabilities, as is the manner in which the impacts materialise. The differences in coronavirus infection and mortality rates at regional and local levels demonstrate that underlying socio-economic factors and governmental policy significantly influence, for example, the severity

of infection rates, exposure to the virus, ability to withstand the economic impacts, access to medical assistance and education. The COVID-19 pandemic, therefore, highlights the need to adopt an intersectional lens of the structural conditions that interact with the pandemic, when developing response measures and deciding on how to prioritise them (Bowleg, 2020).

So where to start? The near-universal reach of the impacts of COVID-19 means that the volume of issues to consider is a considerable challenge. Almost every demographic must be considered in a response plan and almost every activity and sector require targeted and specific policies to mitigate the negative impacts of COVID-19. The questions then emerge: how can stakeholders meaningfully appreciate the nuances of vulnerability when considering such far-reaching policy? How can they tailor their approaches to both understand and accommodate these disparate voices, and these interwoven and entangled demands and needs?

Academic and policy-focused output dedicated to these considerations is expanding. Consider, for instance, the UN Secretary General guidance highlighting the need for special emphasis on gender (Guterres, no date), on disability (United Nations, no date) and on humanitarian settings (United Nations Secretary-General, 2020). These statements move beyond siloed approaches, which treated these characteristics as uniform, and consider them unique critical factors in appreciating the structural dynamics that produce the context in which individuals and communities operate. Importantly, recognising the diversity of contexts means recognising that access to information and the necessary content of communications should differ depending on the characteristics of a community.

This article is written in the context of the EU-funded COVINFORM project.<sup>1</sup> The COVINFORM project will examine national government communication strategies and practices to communicate risk and utilise open data to paint a more holistic picture of vulnerability across selected European contexts. Primary qualitative research, data analysis and data modelling will be undertaken to map vulnerability indicators and consider the impacts on vulnerable

groups at national, regional and local levels. The findings and outputs of the project will be used to develop solutions, guidelines, and good practices that ensure the needs of vulnerable and marginalised groups are appropriately considered across different elements of the response, including communication. At this stage of the project, desk-based research is being undertaken to examine the concept of vulnerability, which will inform the research design for conducting primary qualitative research with vulnerable groups.

### **Beyond a 'one size fits all' approach to risk communication**

When applying the lens of intersectionality to the context of the COVID-19 pandemic, it provides two primary benefits. Firstly, it allows for a more nuanced and granular appreciation of how people are affected – the vectors of vulnerability and the structural dynamics that dictate behaviours. Secondly, it allows for the calibration of communication strategies to the needs of certain communities. For example, understanding that the interaction of class with ethnicity produce the higher rates of infection for the BAME community in the UK, who disproportionately work in public-facing employment and live in more densely populated areas (Office for National Statistics, 2020).

Another community disproportionately impacted by COVID-19 was care home residents, attributing to almost half of all COVID-19 deaths in Western countries (Comas-Herrera et al., 2021). The pandemic has raised questions about how countries care for people who reside in care homes who are at increased risk due to their health status and the proximity of their living conditions. For example, in England, the Department of Health and Social Care (DHSC), adopted a policy, executed by the National Health Service (NHS) England, that resulted in 25,000 patients, including those infected or possibly infected with COVID-19 who had not been tested, being discharged from hospital into care homes between 17 March and 15 April 2020 (Amnesty International, 2020). This highlights a significant gap in the government response to vulnerable older adults and social care providers in the pandemic's preparedness. Care homes

<sup>1</sup> <https://www.covinform.eu>

quickly became the focus across Europe in the early stages of the pandemic, and governments responded by restricting all outside contact from as early as 2 March, to protect care residents (European Centre for Disease Prevention and Control, 2020). In England, this advice was not initially communicated, and some care homes implemented their own ban on visitors several weeks before the government advice on 2 April 2020. Whilst physical restrictions are necessary to avoid COVID-related mortality, physical distancing for people in care facilities could be detrimental to their wellbeing and that of their loved ones. A study by Erwin Stolz, Hannes Mayerl and Wolfgang Freidl (2021), suggests that the loneliness of older adults in Austria increased as a result of COVID-19 restrictions. Future pandemic planning needs provisions to balance the risk to life and the complex circumstances of care home residents and older adults. Examples could be taken from Germany and the Netherlands, where care homes created unique solutions to interact with family members, such as creating virus-proof environments (Curry & Langins, 2020).

A more recent example of vulnerability related to the COVID-19 pandemic pertains to vaccine hesitancy and the vaccine roll-out in several countries. A survey of 1,007 Austrian people identified demographic factors such as being male, older, and living in an urban area, as resulting in lower levels of vaccine hesitancy (Schernhammer et al., 2021). The study also highlighted that vaccine hesitancy was higher amongst respondents favouring political opposition parties and those that did not vote in the last election (ibid). In England, the vaccine coverage is reported and includes statistics on specific demographical features, including age, sex, ethnicity and deprivation index (GitHub, 2020). *The Guardian* has reported on research into disparities in vaccine take-up rates in England (Parveen & Barr, 2021). The study found that richer areas had far higher take-up rates than poorer ones, exemplifying a “vaccine gap”, and urged that inequalities be addressed to maintain England’s vaccine strategy. For example, the London borough of Southwark was found to have the most pronounced vaccine gap. Poorer areas in that borough have larger BAME populations, leading experts to note that “the wide discrepancies revealed by the analysis reflected the intersection of inequalities of race and poverty” (McIntyre, Duncan & Sabbagh, 2021).

This is an issue because vaccination programmes require high vaccine take-up rates to eliminate viruses such as COVID-19, so it moves beyond a risk to individuals to a broader question of public health. To address this issue, communication strategies should consider why certain groups are more hesitant or unable to have the vaccine and then tailor their communications to these specific groups, ultimately to contribute to a more inclusive strategy that reduces vulnerabilities. For instance, British broadcasters conducted a video campaign to encourage ethnic minority communities to get vaccinated by featuring famous personalities from these communities in television advertisements that addressed cultural concerns about the vaccine (Mohdin, 2021). Campaigns that do not consider the information needs and perspectives of different groups can result in criticism, negative public reaction and potentially alienate intended audiences. For instance, the UK Government had to withdraw a social media advert requesting people to “Stay Home. Save Lives” due to criticism concerning its stereotyping women by including three scenes of women cleaning, ironing and teaching children (BBC, 2021).

As people witness the roll-out and completion of large-scale medical treatment and vaccine initiatives, governments’ policy responses have focused on the communication of protective measures. Nevertheless, as highlighted above, the specific vulnerabilities of a community could impact the ability to access information or action the recommended advice. For instance, throughout the pandemic, people in low-income households have been less able to self-isolate. An inability to do without income, a lack of suitable housing for prolonged isolation, a need to carry out informal care obligations, among a host of other reasons, mean that these experiences must be taken into account. Moreover, recognising the higher probability that persons in marginalised communities will face these conditions demonstrates this need for an intersectional lens – perhaps as showcased by the structural conditions that lead BAME communities in the UK to have higher rates of COVID-19 (Public Health England, 2020).

A lack of two-way communication and dialogue may mean that the needs and concerns are not captured and filtered into communication strategies (Owen, 2020). This two-way

communication and dialogue, as recommended by the World Health Organisation, entails ongoing interaction with communities from the onset of the communication strategy, with the ultimate outputs being tailored to their needs (IFRC, UNICEF, & WHO, 2020a). By failing to engage in direct communication, the concern is that populations may be effectively excluded from COVID-19 communications and policy, acting to exacerbate their vulnerability and subject them to social stigma where they are unable to meet the generic standards set (IFRC, UNICEF & WHO, 2020b).

To expand upon this, it is helpful to look at how two-way communication can help to mitigate against the intersecting impact affecting refugees and irregular migrants during the COVID-19 pandemic. The barriers that place these communities at higher risk of harm are numerous – ranging from the lack of disposable income, social support networks, formal status, and accessible information, to the harms of xenophobic discrimination, and a lack of knowledge amongst healthcare professionals on accessing these populations (Unicef et al., 2020; OECD, 2020). Building relationships with community and diaspora representatives, civil society organisations, religious groups may act not only to disseminate messages directly to communities, but also to act as a receiver of community opinion. These efforts should not consider communities as hegemonic blocks, but rather, diverse networks reaching across the important community groups should be built and maintained. Once these trusted channels are in place, they should be utilised as a forum for receiving input from the community on their experiences. In this respect, feedback will be fused to dissemination, acting to capture thoughts, concerns, rumours and misinformation as well as the experiences of these groups. As states and organisations have begun to set up social media channels, they have emboldened refugees and irregular migrants' existing abilities to organise and share information, while providing forums for communication more suited to their context. Additionally, they have been used to help target assistance, provide tailored advice and counselling, and direct individuals to accessible information. Indeed, these efforts highlight just one of the ways by which these two-way communication networks have operated in practice (UNHCR, 2020).

## Shifting towards more inclusive communication processes

Two-way communication and dialogue with those receiving the communication is important “to understand risk perceptions, behaviours and existing barriers, specific needs [and] knowledge gaps” (IFRC, Unicef & WHO, 2020a). Here, we can see a shift away from paternalistic approaches towards a more inclusive process. By giving weight to the experiences and input of groups who will have their own understanding of where and how their vulnerability manifests it is possible to build a “bottom-up” component in risk communication strategies (Gilmore et al., 2020).

To fill their knowledge gap on at-risk communities, communication and dialogue strategies should be rooted in the community. Such approaches should seek to utilise contact points with trusted figures within the community, and organising procedures to obtain the direct opinions from the public, through key informant interviews and focus groups, rapid assessments and surveys as well as monitoring the media. These efforts will be invaluable for gaining the insights from and about hard to reach at-risk communities, such as homeless persons (Lewer et al., 2020) or irregular migrants (OECD, 2020).

Moreover, as communication strategies seek to create new behavioural norms, it is possible that those who cannot comply with these norms are blamed or criticised. This is particularly the case where those unable to comply will likely already come from marginalised communities already subjected to discrimination. In this respect, having a “one-size-fits-all” approach that is calibrated to more hegemonic communities' capacities risks exacerbating the marginalisation of those unable to meet these standards. As such, the messaging must be targeted to people on the basis of their risk levels and capacities in order to be actionable by the community. Failing to provide realistic advice may result in stigmatisation and potentially disillusionment with the COVID-19 strategies themselves (Sotgiu & Dobler, 2020). This is particularly apparent where people's vulnerability prevents them from being able to cohere with guidance. For instance, as demonstrated in the United States of America (US), poor workers' rights, a fragmented and often inaccessibly costly health care system and high living costs have resulted in service workers being unable to adhere

to public health guidelines following a potential workplace exposure. Analysing the interplay of these listed structural issues can help to determine where messaging should be targeted. In these instances, rather than focusing on behaviour in a context-neutral and individualised manner, it can point to the need for communication targeted at employers on the need for improved conditions, policies and practices for their staff. On the more extreme end of the resultant consequences, communication strategies that are not attuned to vulnerabilities can include the perpetration of acts of direct violence on persons. For instance, language regarding the nature of the threat could also produce varying effects on communities. The discussions on the fact that the virus had originated in China (which the previous US administration was particularly keen to emphasise), for example, resulted in xenophobic attacks (Human Rights Watch, 2020). In this sense, the political atmosphere where certain (and often marginalised) community groups are more susceptible to stigmatisation and xenophobic attack is directly relevant and points to a wider need to include these experiences in communication strategies. Ultimately, individuals and groups experience this pandemic differently. Official responses must react to the breadth of needs and challenges.

## Conclusion

This article has outlined how vulnerable groups are disproportionately impacted by a disaster, and COVID-19 is no exception. It has highlighted a number of different factors that have been found to influence vulnerability to disasters and/or COVID-19 such as class, race, gender, income, and health and immigration status. These factors do not exist in isolation and can combine to create intersecting vulnerabilities. Understanding these different vulnerabilities is a critical step in being able to identify individual and community communication needs and ensuring that different groups have access to relevant information.

In contrast, a lack of understanding of the vulnerabilities that exist can result in exclusion and potentially increase risk and vulnerability. The COVID-19 pandemic has not only impacted those with pre-existing vulnerabilities but has also created new vulnerabilities that need to be considered when developing communication strategies.

Interaction and two-way communication can ensure that an individual or communities needs and concerns are filtered into inclusive communication strategies. Bottom-up approaches that seek to understand risk perceptions, behaviours and existing barriers, specific needs and knowledge gaps can inform the development of tailored communications responding directly to these needs.

However, as outlined by Andrulis et al., 2011, socio-economic factors and a lack of support for culturally and linguistically appropriate services and programmes can act as barriers to developing inclusive communication. There is a need for further research to understand these barriers and mitigation measures. Additionally, as highlighted by Clark-Ginsberg and Petrun Sayers (2020), the authors acknowledge that there is an urgent need for research related to COVID-19 communication, particularly comparative research. Research comparing the COVID-19 communication practices across different countries will be undertaken in a later phase of the COVINFORM project. As a first step, the consortium is examining the concept of vulnerability and its different dimensions to inform the development of the research design.

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