Ten considerations for effectively managing the COVID-19 transition

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Abstract

Governments around the world have implemented measures to manage the transmission of coronavirus disease 2019 (COVID-19). While the majority of these measures are proving effective, they have a high social and economic cost, and response strategies are being adjusted. The World Health Organization (WHO) recommends that communities should have a voice, be informed and engaged and participate in this transition phase. We propose ten considerations to support this principle: (1) implement a phased approach to a 'new normal'; (2) balance individual rights with the social good; (3) prioritise people at highest risk of negative consequences; (4) provide special support for healthcare workers and caring staff; (5) build, strengthen and maintain trust; (6) enlist existing social norms and foster healthy new norms; (7) increase resilience and self-efficacy; (8) use clear and positive language; (9) anticipate and manage misinformation and (10) engage with media outlets. The transition phase should also be informed by real-time data according to which governmental responses should be updated.

The rapid escalation and global spread of coronavirus disease 2019 (COVID-19) has prompted governments to implement policies and measures to manage virus transmission, which has given health systems time to prepare and mitigate the impact of the pandemic. While the majority of these measures are proving effective, they have a high social, psychological[1] and economic cost and are, therefore, not sustainable. Some countries and smaller jurisdictions are entering a phase of *transition* during which a 'de-escalation of global actions may occur, and reduction in response activities or movement towards recovery actions by countries may be appropriate, according to their own risk assessments'[2] (p. 14). This transition has challenges. Until a vaccine or effective treatment becomes available, public behaviour and adherence to national and sub-national response strategies—notably social and physical distancing measures (SPDM)—will continue to be key measures for controlling the virus. One of the six key criteria that the World Health Organization (WHO) Regional Office for Europe[3] have defined for the transition is that communities should have a voice and be aware of and engaged in the transition process. We aim to substantiate this principle with available evidence and expert advice.

Unwanted scenarios

At worst, a poorly timed and badly managed transition threatens the gains that each nation has collectively achieved—potentially with high social and economic costs[4–6] (5: preprint without peer-review). Historical evidence from the 1918 influenza pandemic shows that a second wave of infection can follow the removal of SPDM and lockdowns[7,8]. Each country's government can apply lessons learnt from experience and analyse the current situation to anticipate potential unwanted scenarios and plan mitigation measures. These scenarios are likely to vary depending on cultural context. However, in general, the following scenarios and situations should be considered.

A continuum of reactions

At one end of the continuum of public responses to the pandemic is a decline in feelings of fear and threat. A lack of perceived risk (e.g. due to declining cases or psychological adjustment to the new situation) can cause decreased adherence to measures[9] (preprint with internal peer-review) such as SPDM. Moreover, people's desire to reduce loneliness as soon as possible after a period of prolonged enforced isolation may be strong, and the loosening of response measures might seem like standing in front of a rich buffet after a diet or period of fasting[10] (preprint without peer-review). Just as we might be tempted to binge eat, our craving to socialise may grow with each day of the pandemic. At the extreme end of the continuum of reactions, distrust of authorities, conspiracy thinking or reactance (anger due to restrictions) may lead to social movements against SPDM norms and policies and a rise in pro-social closeness and interaction. These reactions may be underpinned by messages that question the appropriateness of

government pandemic measures, which can increase distrust among broader segments of the population. This scenario is not dissimilar to events and patterns related to vaccination[11–13]. In addition, specific population groups may lack the capability to continue adhering to restrictions and recommendations. These groups may include youth, people with anxiety and other mental health disorders, people who lack social support structures, financially disadvantaged groups, the homeless, indigenous populations, mobile populations, people with chronic illness, people experiencing abuse or domestic violence, people living in long-term care facilities and the persons who care for them and healthcare workers. People with lower health literacy may face additional difficulties when navigating these challenges[14]. Conversely, some people may be overly cautious due to fear and worry[15] and may continue to over-implement restrictions[16], avoid supportive social interactions and delay seeing health care providers for potentially life-saving measures, such as vaccinations or check-ups.

Uncertainty and lack of clarity

As response strategies are continuously adjusted, it is likely that debates in the political and public spheres related to unresolved dilemmas or the appropriateness of the implemented measures will increase. How measures are implemented can fluctuate between what scholars refer to as societal tightness (e.g. having strict rules and punishing deviance) and societal looseness (e.g. having more permissive rules and lax punishments)[17,18] (18: preprint without peer-review). Moreover, the transition process is likely to be bidirectional and to require continuous adjustment[3], and predictability will be challenging due to uncertainty regarding the evolution of the outbreak. People will need to navigate these adjustments and the lack of predictability, as well as complex and ambiguous messages (e.g. see some friends but not too many friends) and possibly competing demands from the social and cultural environment regarding social interaction[19,20]. Collectively, these situations may result in individuals developing idiosyncratic interpretations of restrictions as a coping strategy[21].

Stigma and discrimination

Disease can evoke fear and motivate people to separate themselves from infected individuals by stigmatising them[22–24]. Examples include the stigmatization of gay men as an early response to AIDS[25] and of 'Typhoid Mary' (Mary Mallon) in the early twentieth century. The latter was apprehended by authorities in Manhattan for spreading typhoid via her work as a cook, which caused many deaths[24]. In the current situation, certain population groups (e.g. health workers or certain ethnic groups) in some countries may be perceived and branded as virus transmitters[26,27]. COVID-19 may also become associated with unhygienic or careless practices. This thinking could increase the mental distress and anxiety of people who are infected[28] (preprint without peer-review) and reduce compliance with regard to testing

and engaging in the contact tracing process[29]. Moreover, individuals who are at higher risk of severe illness (and their families) may be advised to continue strict compliance with restrictions (e.g. working from home). These individuals may be exposed to new forms of stigma, blame or discrimination as societal expectations shift, especially in contexts where legal terminology is unclear.

Ten considerations

Avoiding these potential unwanted scenarios calls for careful planning and consideration of the perspectives and engagement of populations[3] and should be informed by evidence and expert advice from the social and behavioural sciences and medical humanities. To support a key WHO criterion for the transition (that communities should have a voice, be informed, engaged and participate), we propose ten considerations for governments (Figure 1). Consideration 1 relates to the central idea that communities must be aware that there will be no going back to normal but a stepwise approach to a 'new normal'. The other nine considerations relate to giving communities a voice (Considerations 2 to 4), engaging them in the transition (Considerations 5 to 7) and informing them (Considerations 8 to 10)[3]. These considerations are intended to support authorities in tailoring response strategies that will be accepted by the population and priority target groups and that are likely to be effective[3,11,30,31].

To gather existing evidence and experiences of previous crises and brainstorm how this information could support the transition phase, the first authors convened a group of experts, who reflect a diversity of academic disciplines, domain expertise and familiarity with infectious diseases in general and COVID-19 in particular. This brainstorming was conducted online over three days. The first authors synthesised the longlist of relevant issues into a shortlist, which was commented on by the full group in a shared document. When a consensus was reached regarding the number of considerations and their respective scope, the first authors drafted the sections and the experts added evidence and relevant references. The entire group reviewed the final version. Thus, the resulting ten considerations, which are presented in Figure 1 and explained with examples in Table 1, are based on expert advice and available evidence. We suggest that, where possible, each consideration be monitored, informed and qualified using real-time empirical evidence (sometimes referred to as 'behavioural insights'). This could be achieved via population surveys[32], media and social media monitoring, ethnographic studies, COVID-19 hotline monitoring and rapid assessment of specific population groups. While the following considerations have been devised for COVID-19, they may also be helpful for addressing future unexpected events.

Consideration 1

Implement a phased approach to a new normal

At the centre of transition management is the assumption that an immediate return to normal will not be possible. Instead, the transition process will take place in accordance with a phased approach whereby society, systems and services are gradually re-opened, potentially in new forms. Each phase may involve adjustments to restrictions and potential re-employment of previous stricter measures. During this complex process, if people think that they are or soon will be returning to normal, their actions may hasten the onset of a second wave of the outbreak[4]. Insights on how to mitigate this and maximise the effectiveness of a phased approach to a new normal can be gained from studies that investigate how people acquire new habits. These include studies on adjusting social norms in new student populations[33,34], evaluating procedures and aids for prisoners returning to society[35], developing pedagogical steps for small children who learn to stay in kindergarten[36] and normalising behaviours for people with eating disorders[37]. Different as they are, these studies all employ a step-by-step approach to practising new behaviours in old environments whereby successfully acquiring habits is a function of repetition[38–40]. In each case, the transition process is iterative. It involves detailed planning, setting goals for each stage and stabilising, recapping and monitoring progress[39] and is underpinned by clear communication. The COVID-19 transition process involves defining and communicating specific phases in advance, while also accounting for the uncertainty of the outbreak evolution; preparing people for planned adjustments to the response strategy; and transparently communicating what is known, what is not known, and the criteria applied when making decisions.

Consideration 2

Balance individual rights with the social good

The pandemic has prompted governments to temporarily introduce restrictions that infringe on individual rights, such as freedom of movement, freedom of assembly and the right to practise religion in groups. Public health approaches are often utilitarian in essence, which means that they maximise the overall benefit for the population[41]. Willingness to act for the benefit of society is subject to cultural differences and is more prominent in collectivist countries than in individualistic countries, where maximising individual benefit is prioritised[42,43]. These differences can also affect the level of acceptance of measures and make it difficult to predict acceptance of a strategy in multiple regions or countries (e.g. wearing masks to protect others may be well accepted in some Asian countries, but this does not necessarily predict high willingness to wear masks in European countries). Difficult questions can also arise regarding how to balance utilitarian values conducive to public health with respect for individual rights, equity and personal dignity. For example, in certain limited cases, involuntary quarantine might be a legitimate public health option[44–46]. However, efforts to protect public health should respect fundamental rights, such as freedom of speech, privacy, due process of law, freedom from discrimination and freedom

of religion. Restrictions that are not regarded as justified may also jeopardise public support for the pandemic response strategy and trust in authorities[47]. Challenging cases, such as people exercising freedom of speech to spread falsehoods that harm public health, may arise. Responses to these challenges may vary from country to country. However, in general, the continued adjustment of the response strategy, including decisions on which measures to adjust, lift or re-employ, should be maximally respectful of rights and the foundational interest of human dignity (https://www.thehastingscenter.org/briefingbook/pandemic/). Empirical evidence can inform this decision-making by enabling authorities to understand norms and values, ensure the acceptability of implemented and planned measures with respect to both individual and societal gains and detect shifts in acceptance or barriers to measures[32,48].

Consideration 3

Prioritise people at highest risk of negative consequences

The greatest negative impact of COVID-19 is felt amongst people who experience disadvantage, especially poor and underserved groups[49] (see also https://www.un.org/development/desa/dspd/2020/04/social-impact-of-covid-19). Evidence from other infectious diseases contexts shows that socio-economic, equality-related disadvantages increase the risk of negative psychological, mental and physical health, social, and economic consequences[50–52]. It can be assumed that groups who suffer these consequences will also encounter difficulties in adhering to recommended behaviours in the long term, Therefore, mitigating the negative consequences for these groups will result in individual as well as collective gain. Surveys and rapid assessments can help identify priority groups who are likely to suffer the most. National response strategies could consider basic needs, such as access to food, safe housing, health care, social care and employment and an understanding and acknowledgement of the barriers faced by these different groups. Structural interventions can help support recommended behaviours[51,53,54]. For instance, a strategy for a staged return to work could consider a return to work for people who are essential for the maintenance of the system[55] (preprint without peer-review) or who face the least risk. Such a strategy could also include a needs assessment for new measures to be implemented to prevent or alleviate negative repercussions for those who cannot return to work, such as individuals and the families of individuals who are in COVID-19 risk groups. Working closely with unions, worker collectives and organisations that serve people at the margins can help ensure that the transition is structural.

Consideration 4

Provide special support for healthcare and caring staff

Many healthcare workers were already under pressure before the pandemic for a variety of structural, professional and personal reasons[56], and the current situation adds to this pressure. In the transition phase, special concern for those who take care of high-risk groups, including people who work in health care and public health, essential service workers and people who work in long-term care facilities, may be necessary. Special training, guidelines and support services may be needed. Healthcare workers and caring staff will need to continue protecting themselves from virus exposure and are likely to need further emotional and psychological support to deal with the loss of colleagues or family members or post-traumatic stress. Surveys and rapid assessments of healthcare and caring staff can provide insights into their needs and how to respond to these needs[57]. Access to workplace or home-based webinars[58] and the development of structured information delivery during handovers and in-service meetings can support this important group. This support could be combined with financial and symbolic rewards and public recognition[59,60].

Consideration 5

Build, strengthen, and maintain trust

By their nature, pandemics create inconsistency and uncertainty of a temporal, spatial and normative nature[61]. Science changes rapidly, and decisions may be tailored to certain contexts and be based on many considerations. This can produce inconsistencies between the risk of viral transmission and the restrictions that exist. Trust in institutions (i.e. perceptions of them as competent, honest and benevolent[11,47]) influences risk perceptions[62], helps people manage complexity and is crucial for legitimising decisions made by authorities[63–65]. A strong sense of public trust is critical for harnessing public cooperation and achieving the high rates of behaviour adherence necessary for pandemic management. Therefore, actions and communication should aim to maintain or increase trust[66]. Transparent communication of what is known, what is not known, and what efforts are being taken to learn more can contribute to building a sense of trust[67–69]. Knowing the rationale for decisions makes it easier for people to internalise them into mechanisms of intrinsic motivation[70], so scientific advice to governments should be transparent and not subject to political or government influence. Stakeholder coordination also contributes to trust as it generates consistency and reinforcement of messages[67]. Governments can obtain the support of individuals or groups who enjoy high levels of trust to communicate important messages or to reach more population groups in culturally and linguistically diverse populations (e.g. religious leaders, former politicians and public figures from the arts, culture, sports). Moreover, robust democratic infrastructures for community voices and pathways for these voices

to be translated into decision-making can help to maintain trust[71]. Open access to relevant information expressed in culturally sensitive language can also contribute to a transparent system[72]. Community engagement can demonstrate that the population is being heard and that their views are being considered by decision-makers[73,74] and promote trust. Surveys and other opportunities to monitor and detect possible shifts in trust and understand how this may be related to new events or new restrictions can enable decision-makers to respond accordingly.

Consideration 6

Enlist existing social norms and foster healthy new norms

Prevailing social norms shape people's behaviours[75,76]. The rapid employment of risk-reduction strategies in many countries during the pandemic has been made possible by appealing to longstanding norms and, crucially, by creating new norms to support these strategies (e.g. not shaking hands and staying at home). Social norms can also be invoked to support a transition, incremental or otherwise. Historical evidence shows that norms can shift rapidly as a consequence of high-profile actions by authoritative institutions[77,78]. Once norms are established, they can be drawn upon for communication and to enforce social compliance. Emphasising the social norms of a target group (e.g. health care workers, young people, the elderly, newcomers, ethnic groups and religious communities[79]) can increase adherence to interventions and improve the effectiveness of communication measures[30,80,81]. Meta-analytic evidence also suggests that exposure to depictions of risky behaviour is positively correlated with risk-taking, including exposure to risk-positive cognition and attitudes[82]. Thus, messages that privilege examples of desired behaviours are likely to lead to higher adherence than those that emphasise punishment for perceived breaches[83]. When measures are adjusted or when they become more local, messages about what is acceptable and appropriate behaviour may become mixed. Even people who wish to abide by messages from public health authorities may feel pressure to comply with requests to violate the measures (and their private preferences) from others in their immediate environment[20]. Guidance on how to resist pressure to participate in large social gatherings and oppose pressure to violate social norms or expectations can be helpful (and can increase self-efficacy; see Consideration 7). Role models, influencers, religious leaders and others who are trusted or in the public eye can help to strengthen prevailing social norms and support new norms[84]. In connection with consolidating positive social norms, emphasising the existence of a broadly shared endeavour and social solidarity—a shared appreciation of interdependence among individuals in a society—and acknowledging that strict rules are useful in the context of high societal threats[17,85] can be useful during mass emergencies that require collective action[86]. Increasing people's sense of social empathy towards those at highest risk[87] (preprint without peer-review) could be helpful in the context of the COVID-19 transition phase for promoting pro-social actions, such as reducing crowds

and avoiding the hoarding of essential supplies (e.g. medical masks). Regular surveys and culturally sensitive studies can be employed to understand social norms and expectations related to COVID-19, detect shifts in these norms and possible new emerging issues (e.g. stigma, misperceptions and conspiracy theories) and leverage this insight to plan and communicate the most socially acceptable measures.

Consideration 7

Increase resilience and self-efficacy

Resilience has been defined as the ability to recover after a stressful period[88]. Higher levels of resilience among the public reduce the possible adverse effects of a crisis[89]. Conflicting information, competing social interests, internal motivational dynamics and threats to daily income and basic needs, such as food or shelter, are demanding for individuals and communities[19]. In addition to ensuring the fulfilment of basic needs, strengthening resilience[90,91] can be valuable for crisis management. Recommendations for strengthening resilience include accepting the inevitable (the pandemic has already had a substantial impact on our societies, which may be alleviated but is not likely to end in the near future.); focusing on positive gains (e.g. being able to see some friends again even if we cannot attend large parties); drawing attention to progress (e.g. identifying strategies that have been working); measuring and attending to people's day-to-day emotional states and well-being and improvements in public health; taking responsibility (e.g. acting where possible); understanding our limitations (making changes that are possible and accepting what is not changeable); reversing negative thoughts (focusing on learning rather than on mistakes); knowing our strengths (highlighting past successes as individuals and communities and strengthening people's sense of self-efficacy). In some settings, where basic needs are being met and appropriate resources are available, resilience training can be conducted using apps, online programs or large-scale media campaigns[92,93].

One response to fear caused by previously unimaginable adversity is to attempt to control the fear by denying disturbing information and taking actions that are not consistent with individual or collective interests[94,95]. Such responses can cause non-compliance with public health recommendations; however, they can be mitigated by emphasising *self-efficacy* (the belief that an action can be completed[96]) and *response efficacy* (the belief that an action can reduce a threat[95,97]). Explaining what should be done (e.g. regular handwashing with water and soap) and the reasons for doing it (e.g. soap breaks down fatty membranes to destroy viruses and bacteria) can promote response efficacy[98]. Making change as easy as possible so that people understand the actions they should take to protect themselves and providing feedback on these actions can increase self-efficacy[99]. It can also increase health literacy, which is the ability to acquire, understand and use health information. Given the high levels of complex, contradictory

and false information associated with this pandemic, health literacy is a critical issue, particularly for population groups who experience disadvantage[14]. Studies show that feeling able to protect oneself against COVID-19 and knowing about effective measures are predictors of protective behaviours[97,100] (100: preprint without peer-review). Strengthening self-efficacy and response efficacy in a manner that reaches people with low health literacy can empower people to control and take ownership of their actions and generate adherence to protective measures. Should it be necessary to reinstate such measures during future waves of infection, people with high self-efficacy and response efficacy may be more willing to resume such measures as they know the measures will protect them and they believe that they can adhere to the measures.

Consideration 8

Use clear and positive language

Behavioural science emphasises the importance of ensuring clarity in language and reducing cognitive load[101]. If people find new guidance confusing or difficult to understand, they might ignore it. Complex guidance can create serious navigation problems. An emergency such as the COVID-19 pandemic is characterised by uncertainty and clear guidance is needed. However, such guidance is often based on uncertain evidence. Research has shown that acknowledging uncertainty does not undermine trust[69]. Furthermore, while a language of *crisis, panic* and *war* can increase risk awareness—which may be needed—it can also cause anxiety, incite selfish or competitive reactions and undermine people's sense of collective support and care[102]. Hoarding behaviour, which has been seen in many countries, may be a consequence of this rhetoric[103]. Crisis language may also cause over-cautiousness among some people, who, consequently, may not seek primary care or provide social support to people who need it. By contrast, the use of gain-frame language to highlight the collective gains already achieved and the benefits that could still be achieved may create more ownership and foster compliance with behavioural rules[104]. Building communication strategies that balance risk perception with risk assessment is also key for aligning people's perception of risk with scientific estimations of the risks[103]. Some research suggests that people are less willing to make sacrifices for others when the *benefits* are uncertain[105], so the benefits of compliant behaviour should be made concrete and visible. Ownership of something makes it more valuable to an individual (the endowment effect[106]). Moreover, hedonic framing, which combines smaller losses (e.g. the inconvenience of wearing masks) with larger collective or individual gains (e.g. being able to see friends again), could increase public acceptance of ongoing restrictions[107]. Therefore, the aim should be to highlight the gains that can be made from engaging in target behaviours and activate the internal moral compass that renders personal rewards less important than benefits to others[102,108].

Consideration 9

Anticipate and manage misinformation

COVID-19 is the first global public health emergency to occur in the era of widespread use of social media, the Internet and smartphones. The WHO has acknowledged the existence of an 'infodemic' in addition to the pandemic. The term 'infodemic' refers to the availability of an overwhelming amount of information, which can create confusion regarding which, if any, sources are trustworthy[109]. Pre-emptively exposing people to techniques that are often employed for misinformation and warning people against misleading techniques can reduce their susceptibility to future falsehoods[110,111] (110: preprint without peer-review). This prebunking[112–114] (or cognitive inoculation[115,116]) activates resistance mechanisms in the public and empowers people to assess the reliability of information[111]. However, some misinformation cannot be foreseen. Therefore, debunking approaches[117], which counter widespread myths and uncover why they are wrong[118–120], are also needed when misinformation is disseminated. Cognitive inoculation may also be successful for priming the public for the transition phase. This involves foreseeing the likelihood of widespread misinformation, explaining how people can manage this situation, addressing and talking openly about the possible aversive effects of physical isolation, reassuring people that these aversive effects are reversible and exploring how they can be addressed and mitigated. Pre-empting future waves of the virus based on currently available evidence and clearly communicating the potential continuous adjustment of restrictive measures may lay the foundation for greater acceptance. Prebunking and debunking approaches (i.e. inoculating people against misinformation before spreads and correcting misinformation after it appears) will also be needed if and when a COVID-19 vaccine becomes available, as misinformation about this topic is likely to be disseminated.

Consideration 10

Engage with media outlets

Studies have reported high levels of information-seeking during the COVID-19 pandemic[121] (preprint without peer-review). During previous outbreaks of other diseases, combined trust in both the government and the media has been associated with increased preventive behaviours, such as hand-washing[122]. One study revealed that social media information increased risk perception during an outbreak, while legacy media, such as national television and broadsheet papers, increased proactive preventive behaviour[123]. For governments, media outlets are important influencers and critical channels for reaching the public. Established news and online media outlets can alleviate discomfort during a crisis[124] (preprint without peer-review), showcase appropriate behaviours[125] and provide helpful perspectives from trusted figures (e.g. established social media influencers and medical professionals[126–128]). However, media consumption can also cause stress and anxiety and spread misinformation[102]. Since the media can play a critical role in

communicating and balancing information and influencing public sentiment and discussion during a public health crisis[129,130], the WHO has developed guidance on how authorities can work with the media[131,132]. A combined approach that targets legacy platforms, audience-specific and local outlets and social media may be the most efficient[133]. Particular groups may use, trust or feel represented by certain media[123]—which can be critical in a potentially increasingly polarised debate[134]—and behavioural studies stress the impact of communicating behavioural norms at a local level[125]. Thus, governments can continue to proactively reach out to a variety of media during the transition while respecting their independence and highlighting their role and potential influence[135]. Even if measures have not been implemented, journalists and media can frame shared understandings and prime their audiences for the future using strategies such as introducing important terminology[136] (e.g. 'new normal', 'gradual changes', 'adjustments', 'need for cooperation'). The following key messages may be employed: this is an unprecedented situation; there may be changes to the strategy as we learn more; this is a solvable situation; and greater restrictions may become necessary again in the event of a second or third wave. Journalists and the media can support the framing of the transition phase as an all-of-society approach and responsibly perform their important role by avoiding actions such as feeding confusion and blame and reporting inconsistent messages, controversies, rumours, misinformation and speculation[137,138].

Inform and qualify action with evidence from behavioural and cultural research

To effectively manage the transition phase, the considerations outlined above should be adapted to individual contexts[139]. Thus, the process should be informed by a situation analysis and current evidence from behavioural, social and cultural sciences applicable to the specific context (examples are provided in Table 1) and be supported by engagement with communities. Continued cultural adjustment of the response strategy fosters spaces for listening to the voices of diverse communities during the development of behavioural strategies and the creation of support processes for sustaining behaviours[72,79,140,141]. These data can help us understand how people are experiencing, interpreting, responding to and accepting the COVID-19 response and can inform the development of interventions and support the tailoring of measures to subgroups of the population.

Limitations

Although we sought experts from different global regions and drew on research from around the globe, we are aware that all of the experts except one expert live in high-income countries. Inevitably, their fields of study and lived experiences have shaped the final report. Furthermore, some aspects may be missing from one scientific perspective and over-emphasised from another perspective. However, these limitations were weighed against the need to provide decision-makers with evidence in a very short time.

We also acknowledge that the considerations described in this paper are based on evidence from various sources of literature, some of which relates to outbreaks, crises and pandemic situations and some that is unrelated to these situations. The validity and reliability of the evidence from psychology (and other fields) may be challenged as some studies have not been replicated[142,143]. Moreover, most published research in the field of 'behavioural insights' originates in Western, educated, industrialised, rich and democratic countries[144], which makes generalising the results to other contexts difficult[145]. These limitations have caused some scholars to argue that this type of science should not inform crisis response[143,146] (146: preprint without peer-review). In this paper, however, we propose complementing existing evidence (summarised here) with real-time data collected in specific situations and countries[32]. This combination helps to interpret the newly generated evidence based on existing evidence and to generate and select relevant questions and variables to perform ad-hoc crisis research. In no case should scientific evidence provide decision-makers with a false sense of certainty as all evidence is surrounded by the uncertainty inherent in every scientific process. However, the evidence will help guide thinking and decision-making in a systematic way.

Conclusion

In sum, evidence from multiple sources allows us to better understand population perspectives, gauge emotional responses and subjective experiences, anticipate unwanted scenarios, introduce mitigation measures and plan for the most effective actions to improve public understanding and compliance. Understanding how the pandemic and the restrictions imposed are impacting people's everyday lives, their social and mental health and their motivation and intentions to follow recommended practices is critical for the sustained success of the pandemic response during the transition[3,31] and will be a valuable source for ensuring our preparedness for future pandemics.

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Figure captions

Figure 1: Ten considerations for effectively managing the COVID-19 transition. *Note:* The considerations substantiate the WHO/Euro principle #6 'Communities have a voice, are informed, engaged and participate in the transition'[3] and were derived from an online expert consultation. The considerations do not imply a temporal sequence and are interrelated just as listening to communities, engaging with them and informing them are interlinked. The ten considerations are aimed at providing suggestions to governments. The awareness that there will be no going back to normal but a stepwise adaptation to a 'new normal' is in the centre of the transition process (#1). Giving communities a voice (#2-4), engaging them in the transition (#5-7), and informing them in the best possible way (#8-10)[3] can help effectively manage the transition.

Table 1: Examples of how to enrich the ten considerations with real-time data and further evidence and how to apply the evidence obtained to inform the transition phase

Consideration	How behavioural and cultural research can be applied*	Action examples Action should always be informed by an analysis of the situation**
1) Implement a phased approach to a 'new normal'	Conduct research to understand population acceptance and barriers to measures implemented or planned and employ this research in planning and communication	● Plan a detailed transition: set goals for each phase with red, yellow and green signs for pandemic response adjustment scenarios and transparently communicate these goals ● Anticipate unwanted scenarios based on social, behavioural and cultural literature and previous crises in the country and prepare prevention and mitigation measures for these scenarios ● Provide tailored guidance to priority population groups as needed following segmentation
2) Balance individual rights with the social good	Use evidence from regular surveys, hotline monitoring, social media monitoring and qualitative ethnographic studies to understand prevailing norms and values and acceptability of implemented and planned measures and to detect shifts in acceptance or barriers to measures and be guided by this evidence in planning	● Use existing research to identify elements of culture and history, social norms, beliefs and values and gather multi-disciplinary expert panels to provide input and insight; panels could include anthropologists, historians, social scientists and cultural studies specialists ● Focus messages on identified prevailing norms and values; for example, emphasise the substantial impact of measures on protecting the community, individual families and/or workers ● Consider fundamental issues regarding the individual versus the social good, privacy and protection of individual rights
3) Prioritise people at highest risk of negative consequences	Conduct research to understand implications for people at highest risk, their mental and physical health needs and possible emerging discrimination and stigma and apply this insight to inform action	● Address basic needs and fundamental human rights, such as access to employment, education, housing, food and health care ● Prioritise people who are most severely affected, either mentally, physically or financially ● Ensure that prioritising certain groups will not increase stigma or discrimination and take action to prevent and/or decrease these effects ● Coordinate closely and engage in reciprocal communication with traditional and social media outlets, influencers and mediators who work with these groups
4) Provide special support for healthcare and caring staff	Conduct research to identify specific needs of healthcare and caring staff (e.g. related to working hours, childcare, stress and protective equipment) and respond to these needs	● Express the gratitude of leadership and foster community support ● Provide guidance on the rights and entitlements of healthcare and caring workers ● Provide guidance on organising primary care and long-term care homes and supporting users in accessing them safely ● Support working from home and video-conferencing where possible ● Engage staff in protecting themselves and providing trusted public health advice to patients and the public ● Start planning for inclusion of epidemic management basics and communication with patients in core curricula of medical/nursing schools
5) Build, strengthen, and maintain trust	Conduct research to understand trust in specific institutions, spokespersons and influencers and to detect possible shifts in this area and how such shifts may be related to new events or new	● Organise daily media briefings where trusted spokespersons, identified through population surveys, are clear, humble and empathetic and people feel part of the process instead of feeling as if they are being lectured ● Explain how insights from population surveys are being considered as the voices of populations

		restrictions; use this research to inform planning	● Acknowledge uncertainty, be transparent about unanswered questions and balance the need for clarity with acknowledgement of uncertainty about the evolution of the outbreak ● Respect all voices and respond to all questions
6)	**Enlist existing social norms and foster healthy new norms**	Conduct research to understand social norms and expectations related to COVID-19 and to detect shifts in these expectations and possible new emerging issues (e.g. stigma, misperceptions and conspiracy theories) and leverage this insight in communication and planning of the most socially acceptable measures	● Ensure that risk communication and community engagement occur to establish that measures are both scientifically accurate and acceptable by people ● Engage citizens by providing community leaders with opportunities to co-create transition plans ● Engage grassroots activists, local communities, university students, and volunteers in measures such as psychosocial support, helplines, support for infected people, phone-based contact tracing and message development ● Work with influencers to amplify messages about the transition aimed at different population groups ● Engage influencers and community leaders in sharing guidance on how to cope with competing interests ● Coordinate across sectors; activities could include working with the arts and culture sector to fund or support COVID19-specific arts activities
7)	**Increase resilience and self-efficacy**	Conduct research to understand the population's capability to continue to adhere to restrictions and recommendations, which may signal the need for adjustment to restrictions	● Continue to focus on public health advice regarding COVID-19, including hand and respiratory hygiene, and adjust messages in accordance with transition phase stages ● Produce proactive advice about the importance of self-care, stress management, healthy habits, social interactions and prioritising rest, sleep and exercise, taking into account diversity in health literacy ● Communicate the availability of individual and family support (e.g. education and schooling support, return to work support and guidelines related to alcohol/substance use, tobacco, weight/sedentary time, nutrition, stress, and safely accessing primary care) provided at national level or by the WHO ● Engage with and support communities and organisations who work in the areas of domestic violence, child protection, temporary home offers, social isolation and other areas ● Strengthen coping strategies for navigating competing interests (e.g. guidance on how to respond to expectations of friends and family regarding social interactions)
8)	**Use clear and positive language**	Conduct research to understand general perceptions related to COVID-19 and trust in spokespersons and base strategies on these findings	● Communicate clearly and focus on the benefits and gains ● Seek to communicate risk based on scientific evidence to prevent both under- and over-cautiousness among the public ● Avoid using war language (e.g. war against COVID-19, the frontline response), which may increase stigma and undermine people's sense of collective support and care and lead to individualistic behaviours such as hoarding ● Positive wording may include progress, advance, community, cohesion, improve, perspective, reasonable, resourceful, optimistic and generous ● Refer to 'people who have been infected with COVID-19' rather than 'cases'
9)	**Anticipate and manage mis-information**	Conduct research to identify general perceptions related to COVID-19 and misperceptions and myths	● Anticipate unwanted scenarios and gain insights from social, behavioural and cultural literature, including lessons that can be learned from previous pandemics and crises in the country ● Advise people that they are likely to receive misinformation and inform them where they can access trustworthy facts

			• Communicate proactively regarding potential future waves of transmission and what these scenarios might entail
10) Engage with media outlets	Conduct research to understand and detect shifts in trust in spokespersons and the use of various media outlets within the population and sub-segments of the population; use this insight to plan interactions with the media	• Proactively reach out to media outlets to engage them as partners in the response, respect their independence and highlight their role and potential influence • Use the power of the media to alleviate discomfort from the pandemic; appeal to the media to avoid feeding fear, stress, confusion, polarisation and stigmatisation • Appeal to the media to present authoritative information and avoid confusion with speculations and misinformation	

Note: The table provides examples and is not intended to be read as prescriptive guidance. The examples in columns 2 and 3 were generated by applying the considerations to potential country contexts. Input was suggested and preselected mainly by WHO/Euro staff and reviewed by all authors. * Various opportunities to monitor and understand public sentiments, responses, behaviours and physical and mental health reactions to the pandemic can be drawn upon, such as regular behavioural insight surveys[32,100,147–154] (148-154: preprints of study protocols without peer review), (social) media monitoring[155], COVID-19 hotline monitoring, qualitative ethnographic studies, rapid assessments of priority population groups, diary projects[156], virtual interviews and group discussions, 'big data' such as individual location data (e.g. from mobile phones[157,158]), data on consumer trends and data on use of primary care. ** Examples of sources to be analysed include epidemiological, structural, cultural, financial, political, health systems capacity-related data.

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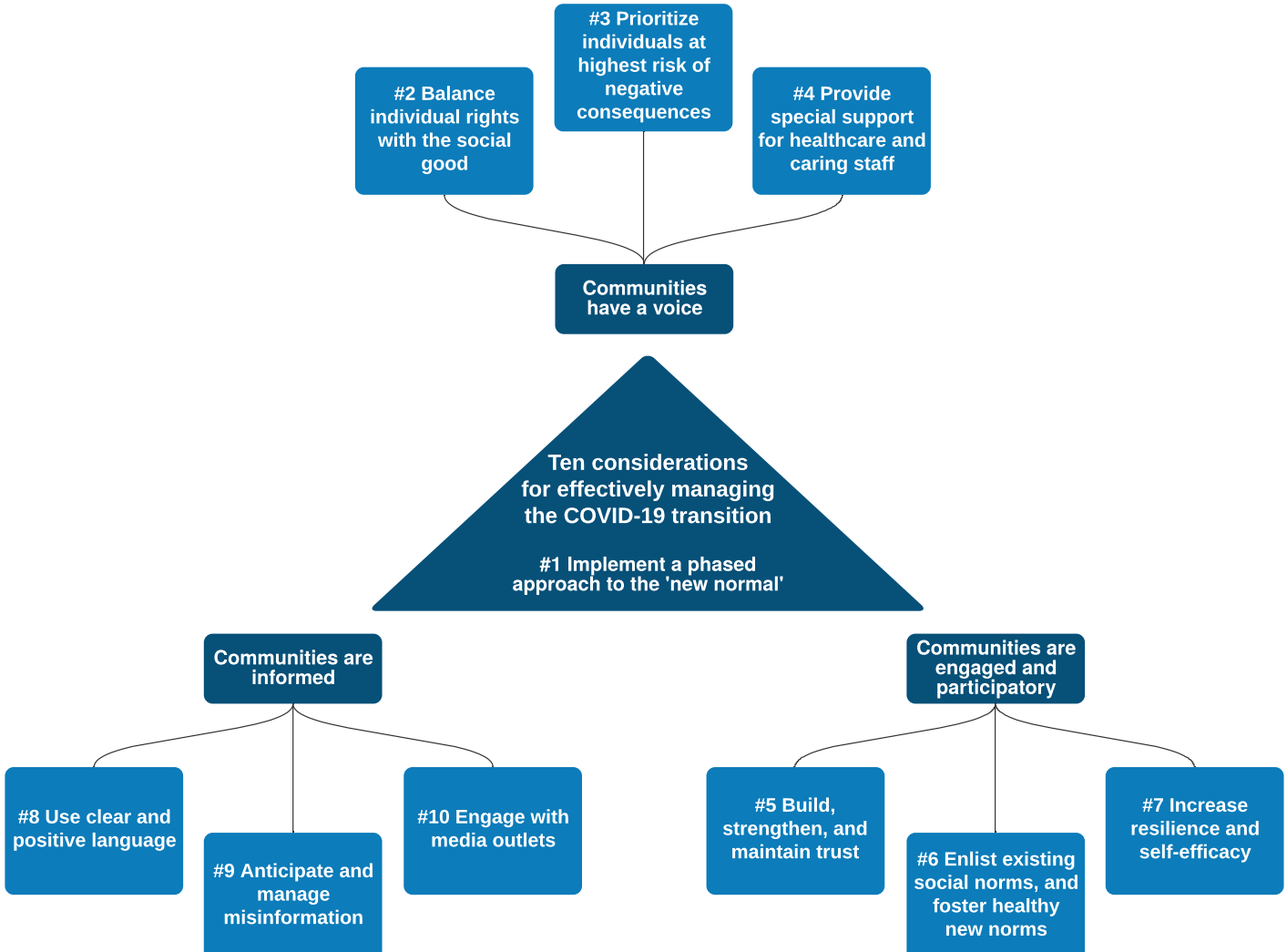
886 **Competing interests**

887 The authors declare no competing interests.


#3 Prioritize individuals at highest risk of negative consequences
#2 Balance individual rights with the social good
#4 Provide special support for healthcare and caring staff
Communities have a voice
Ten considerations for effectively managing the COVID-19 transition
#1 Implement a phased approach to the 'new normal'
Communities are informed
Communities are engaged and participatory
#8 Use clear and positive language
#9 Anticipate and manage misinformation
#10 Engage with media outlets
#5 Build, strengthen, and maintain trust
#6 Enlist existing social norms, and foster healthy new norms
#7 Increase resilience and self-efficacy