

# Social Science in Humanitarian Action

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## Social dimensions of the novel coronavirus (nCoV) outbreak and response: meeting report

Roundtable at the Wellcome Trust, London, 3<sup>rd</sup> February 2020

### Roundtable objectives

- To discuss appropriate social science and humanities inputs that can improve understanding of the outbreak in global terms, including the response in China, Asia and around the world.
- To identify social science evidence needs and modes of engagement with policymakers and practitioners that could inform preparedness and response over the next period.
- To foster mutual learning amongst social scientists and historians working in China and other settings about how our perspectives can most appropriately contribute.

The meeting was organised around three thematic areas:

- 1) The social contexts and dynamics of transmission and spread
- 2) Public health responses
- 3) Communication and messaging

### Understanding the social contexts and dynamics of transmission and spread

The discussion centred on the ecological, social, political and economic dynamics of the outbreak, starting with the zoonotic spillover of the virus, the relevant aspects of the Chinese context as well as the broader global setting. Priority areas for discussion included movement and migration of people, livelihoods, trade and investment, health-seeking practices and the geopolitical context of the epidemic. Meeting participants identified potential areas where social science evidence could contribute to the response, in tandem with medical and epidemiological knowledge. Social science contributions identified were those related to understanding the diversity of local contexts and social systems, and the significance of social differences that might impact on disease occurrence (such as economic and migration status, and access to health care). The themes that emerged were:

#### The nCoV outbreak in the global arena

- Geopolitical shifts have occurred since the SARS outbreak in 2003 which need to be taken into account in relation to considering the unfolding of the outbreak globally and responses to it. China has also correspondingly come to occupy a different position in the Global Public Health arena and within the WHO.
- Mobility and communication have expanded in the past decades, with initiatives such as the Belt and Road increasing connectivity between China and countries in south-east Asia and Africa. The increased connectedness of China is significant - students, businesspeople and other professionals travel frequently within China and globally.
- The Chinese interventions can be viewed as a response to an emerging caseload, but also as representative of pressure on the government to demonstrate a confident and effective response to

both Chinese and Global Public Health audiences. China has been positioned by commentators as influential within WHO and there is speculation as to whether the current response will come to be viewed as an effective model for future epidemic response plans. Social science analysis is key to assessing the response, including any unintended consequences. The potential contributions that a strong and effective civil society can make to the community should be explored.

- Participants discussed the political and economic factors that can influence the framing of a public health threat and who might determine what constitutes such a threat. The group discussed the question of how such a decision is made, the current state of global governance and the different degrees of compliance with the International Health Regulations. Expert commentary on the outbreak has been of the opinion that preparedness mechanisms are stronger globally. The current global tension between the United States and China also received attention in terms of the extent to which this has been influential in the response so far, and how it might influence the next period of response.
- Participants discussed that, since the time of the SARS outbreak, there has been a process of centralisation of health care services and resources in China, accompanied by rapid urbanisation and the phenomenon of the megacity. Participants were of the view that this urbanisation, and reforms in health insurance, have changed health seeking. People in China are now more drawn to seek services in the cities and at hospitals for minor health issues, and the grassroots services and home remedies – both biomedical and Chinese – might be less relevant than before. Health insurance policy encourages people to go to grassroots level health facilities by giving higher reimbursement proportions for health care services provided by lower level health facilities – however, this is not strictly enforced and people gravitate to higher level hospitals. This raises the question of how many people will rely on self-management at home in the current situation of this outbreak, and how many will seek treatment in these centralised facilities. In this crisis, people may revert to more traditional forms of health care as formal services come under increasing pressure. Several factors are likely to shape these decisions as the epidemic unfolds.
- Participants reflected on the differences between the Chinese government's approach to SARS where research showed that migrant workers in particular were identified as a target group for interventions, with some deleterious consequences. It appears that the approach for nCoV is to direct measures at a much broader demographic.
- In the longer term, it is important to consider the large scale shifts that can be seen in China (and in other parts of the world) towards increasing proportions of the population living in very large cities. Research is currently underway that focuses on the complexity of these shifts, with reference to public health risks that can emerge, alongside health benefits.
- A related set of shifts concern diet, with increased demand for animal protein (again both in China, and other countries). The particularities of Chinese dietary preferences and shifts have been the subject of research, as has been the importance of wet markets (some also trading live and wild animals) in socio-cultural life and as a source of fresh food. Important longer-term research agendas concern the relationships between zoonotic spillover, meat consumption and health risks, and the many and sensitive social and livelihood implications involved. In the case of nCoV, these need to be informed also by focused understanding of which animal(s) are implicated both in the origins of the outbreak in a food market in Wuhan, and in possible viral transmission. Currently there are major scientific uncertainties, and there is evidence that responses such as blanket bans on wet markets and other wild animal trade create a series of negative social consequences.

### **Identifying vulnerable populations in terms of public reactions and susceptibility to infection**

- Chinese people and culture have been targeted by prejudice, racism and discrimination, as witnessed in incidents and media coverage in other countries. Such negative reactions are likely to also be related to pre-existing anxieties amongst local populations in various settings about the increased

global presence of China and growing Chinese economic influence. These can fuel prejudice in the current context of fear about an outbreak of nCoV.

- Historical and social science work around previous epidemics shows that epidemics can exacerbate the scapegoating and discrimination of particular social groups. Likewise, stigma and discrimination in an epidemic setting is often rooted in broader historical experiences.
- Understanding the social dynamics of localities at risk of infection will assist in identifying populations that might be particularly vulnerable in the case of nCoV outbreak. Axes of social and economic vulnerability are as important to consider as the factors that make certain groups biologically vulnerable to infection. Marginalised groups at risk (due to factors such as poor access to health care or migration status) can be identified in advance and engaged in preparedness plans.
- As in other epidemics, health workers can be stigmatised. They will have particular understandings of the epidemic, attitudes towards different social groups attending services, and opinions about the adequacy of responses, as well as government measures to provide them with suitable resources and protection. These need to be taken into account as their commitment is crucial to an effective response.

### Gauging social diversity and politics across different scales

- With reference to China, participants discussed the different scales of organisation that need to be considered. In the context of the movement restrictions within and between cities, individual households have become important – here different intergenerational responses to the epidemic manifest, and intergenerational dynamics of care will come into play. However, there are also other ‘units of analysis’ to consider, for example, gated communities in China have become very important in the social organisation of residents, and also have relevance for state monitoring of the population. The relevant scales (household, collective housing, the gated community, the street and so on) need to be identified in each context.
- To adequately understand the response in China, there needs to be a nuanced understanding of internal politics at relevant levels. The Politburo is in charge of the response that combines the activities of many sectors, yet there is also potential competition with local party sections. It is important to understand the dynamics of the response, including the interactions and interests from provincial and central governments, and the different units of public health response agencies such as the China CDC.

## Public health responses

The roundtable discussed the social, economic and livelihood implications of quarantine, screening and other nCoV related public health responses, within China and beyond. The group also explored the implications of societal understandings of disease and risk, and health-seeking behaviour in the context of outbreaks. This discussion covered healthcare resources, and the questions about preparedness and response in other regions beyond China, including Africa, where capacities and political dynamics would be different. Public responses to outbreak-related health interventions was a further focus, including social trust and stigma.

### Health care systems, preparedness and under/overreactions

- Historians emphasised the importance of understanding how an epidemic response by government, and the public reaction to it, is shaped by previous experiences of crises as well as imaginaries of historical epidemic events. The group discussed the influence, in this nCoV case, of SARS, but also H1N1 and the 1918 influenza epidemic. It might be of relevance that the response to the H1N1 epidemic has been retrospectively assessed as an overreaction, given that this nCoV outbreak is drawing comment that it might be more akin to H1N1 than SARS in a number of respects. Participants

discussed whether, amongst certain global and national actors, the nCoV outbreak is being viewed as a kind of 'dry run' for preparedness for a future big 'disease X' – a potential event involving both rapid spread and fatality rates higher than seen (at least so far) for nCoV. More broadly, the history and politics of 'global health security' policy and debates is clearly relevant to understanding the unfolding response to nCoV.

- Participants discussed the fact that the response of the Chinese government has drawn comment because of the extreme measures seen as 'draconian' by some, with concern about the level of surveillance and the militarised nature of the operations; others noted that the measures may foster trust in the government's commitment to the response. Historians pointed to past examples of how extreme controls can have unintended consequences as people attempt to circumvent measures, or are simply unable to follow them given urgent social and livelihood pressures. The group discussed whether a more measured and consensual approach could also be effective, with attention to the tension between public health concerns and individual rights.
- Participants discussed whether the current response will influence future discourses about global preparedness and response, and shape understandings and systems of preparedness. The consensus was that social science and historical perspectives should also be considered before any such shifts are made. Social and historical evidence and ongoing research can contribute to pointing to the inequalities that can be intensified in the case of severe quarantine measures, given that these can affect certain sectors of a population and certain vulnerable groups to a greater extent.
- The nCoV situation in China will give insights into the roll-out of preparedness plans elsewhere. The response to nCoV will be unusual in terms of large-scale quarantining, and (allegedly) the plans for rapid production of vaccines. There will be a need to assess the replicability of these practices in different social contexts and countries, with different health and other resources, and with different political systems and expectations about the relationship between citizens and the state.
- Past outbreaks have demonstrated that the strength of the primary health care system will shape the impact of the disease. This includes not just the system's resources and capacities, but, importantly the extent to which systems are used and trusted by (different) local population groups. There needs to be further understanding of how these system/trust relationships are unfolding in the Chinese context. But critically, there are important questions about the possible impact of the epidemic in countries with far weaker health systems, or where use and trust have been undermined by conflict, inequality and socio-political change.

### **'Unforeseen' consequences of epidemic response activities**

- Different approaches to quarantining and isolation that are being taken in China compared with other countries warrant attention in terms of their social (and health) consequences. The encouragement of treatment in hospitals or quarantining of international travellers from China, contrast with approaches (such as used for seasonal influenza, or in the nCoV public health guidance of some countries) focused on keeping people dispersed, via messages to 'stay home' or contact a health helpline.
- There is extensive experience of the effects of non-pharmaceutical measures such as quarantining in different historical periods and contexts. There are historic examples of non-compliance, resistance, violation of human rights, and questions over public health effectiveness, particularly in the case of large-scale quarantining. There are also challenges associated with taking care of the needs of people in isolation. In the current outbreak in China, participants cited examples of unforeseen reactions like vigilante groups building barricades around villages, and of isolated and vulnerable people not receiving adequate care (as in an example of a disabled child whose father had been quarantined). Questions concern how to keep public health interests at heart whilst mitigating such negative effects.

- There are difficult balances which may be interpreted differently in particular social settings, such as with respect to the salience of individual or collective rights, or the treatment of vulnerable groups.
- Negative experiences of response activities might lead to future effects with negative health impacts, beyond nCoV. For instance, people's fear or distrust of public health activities in the context of an outbreak may undermine their use of health services in future, for different conditions. Or if a particular person is stigmatised in the context of nCoV – for instance as a potential transmissor – this could undermine their future relationship with health care practitioners.
  - Participants raised issues around the major economic impact of public health and quarantining measures. These range from the economic impact of isolating major commercial hubs, which is being felt nationally and globally, as well as the impact on small businesses or livelihoods dependent on movement such as pastoralism or marketing. There is a need for research on such socio-economic impacts and implications – in China and in other countries – and their differential effects on different population groups. This could in turn inform the design of appropriate measures and forms of mitigation/compensation.
  - Participants shared evidence on the measures to ban wet markets and wild animal trade and consumption, which have been discussed in other countries, and highlighted in foreign media. The case for a blanket ban is very weak given the uncertainty and specificity of which animal(s) are implicated in viral spillover and transmission. Moreover 'wet markets' is a very diverse category that encompasses different kinds of markets, and, in the case of China, these are well regulated and inspected. Participants suggested that better regulation is a better option than bans, which will have consequences for the livelihoods and food security of traders and consumers; there is also experience in different contexts (including China) of bans causing trading practices to go underground, and thus outside public health supervision.

## Communication and messaging

Here we explored diverse understandings of the outbreak, and of risks and uncertainties. We appraised information-sharing through official and unofficial channels and drew on perspectives and lessons from past outbreaks globally.

### Evolving perceptions of the disease and the response

- Participants reflected on that fact that, in China, when the number of cases increased and spread beyond Wuhan, most people appear to have followed the recommendations of the authorities, cancelling family gatherings and travel and staying at home. There was a view that young people are more likely to comply with these state directives than the older generation, possibly due to greater internet connectivity.
- According to a 25<sup>th</sup> January survey in China, there were significant demographic differences in people's attitudes to the unfolding outbreak, and their attention to and use of different information sources. Key findings include that higher levels of education meant more attention was paid to the outbreak, and to government statistics. There is high use of social media as an information source – notably Weixin (similar to Whatsapp), and Weibo (like Twitter), and conventional media such as television. The high importance of social media particularly for young people was noted. Less is known about how people not digitally connected – such as people living in remote rural areas – have been gaining information and whether they rely on traditional forms of media; although such groups may be small today, this remains an important research question.
- Social media has played a major role in the social response to the epidemic, making particular departments of government accountable and raising important research questions. Participants

- discussed the potential of using social media analysis to (i) appraise what is happening to different communities' relationship with the response, and (ii) to try and influence or support the response.
- The State institutions are heavily invested in social media, with local and central government, hospitals, and China CDCs, all having Weibo accounts. These are all monitored. They offer two-way communication with the public.
  - UN agencies are tracking social media as part of the RCCE strategy (IFRC, WHO, UNICEF, CDC).
  - There is a view that initially the online community in China was subject to less state involvement. The group discussed that Chinese authorities have taken a strict approach to 'rumours'- with bans and investigation of certain people who are considered to be communicating rumours about the disease, including some who revealed the epidemic at the early stage. Participants discussed an evident shift, namely that messages emerging from local and national media have, a few weeks into the response, been streamlined to communicate facts, figures and the messages approved by the State. There is a question as to whether this streamlining of messages has been a part of the preparedness plans.
  - A large proportion of people – 70% (survey on the 25<sup>th</sup> of Jan) perceive that the government can handle the situation, thinking the outbreak will be contained in 2-3 months.

### **Masks and other communication challenges**

- The group discussed the observation that there has been panic buying in China and globally of surgical masks. In this regard, it is important to consider if messaging around masks has been diverting attention from more life-saving behaviours such as frequent handwashing. It was also noted that masks and their use have different meanings in different country contexts. In Asian contexts, mask-wearing is considered a responsible act and is common practice. In China, the wearing of masks has been recommended by experts and has now become compulsory in public places. Participants discussed the debates regarding the efficacy of masks and whether masks come to act as a talisman to some extent, enabling people to go on with their lives whilst having a feeling of being protected. The majority of people who participated in the survey in China in January, believed in the usefulness of masks. They are used by the majority of people outdoors and a minority use them indoors.
- Participants discussed that social media monitoring suggests that there are some rumours and misconceptions about treatments for nCoV being shared in China e.g. people are recommending treatments that they think would work with the 'common cold', such as salted water and Vitamin C.
- Participants were of the consensus that, with this level of uncertainty, the boundary between 'rumours' and 'real' facts becomes blurred; many people are speculating, and indeed speculation may be seen as a rational response to uncertainty and ambiguity. Participants – drawing on history and social sciences – underlined that rumours are also expressions of broader anxieties, which have historical and social logics rooted in past experience, and that it is important to identify these if 'rumours' and their roles are to be understood, and trust built. A response based on the idea of rumours as 'misperceptions' which can be addressed with 'accurate information' will often be misplaced and might serve to undermine trust.

### **Creating feedback mechanisms between the response and 'the communities'**

- Participants discussed how media monitoring and other methods to gather a range of perspectives from the population, can be harnessed in order to create a dialogue between those affected on the ground, and other agencies. If fear, anxieties and 'rumours' are understood as legitimate responses and people are engaged in dialogue rather than punished, the information could assist in adjusting the public health response and the activities and messaging of agencies. The group discussed the importance of activating such an information loop for meaningful, transparent and accountable community engagement.

## Next steps

There is wide scope to support the response through:

- (i) Synthesising existing contextual and historical experiences to inform the appropriateness of particular public health interventions in China and contexts where the disease could spread.
- (ii) Conveying the local contextual realities of the cities, regions and social groups affected or potentially affected by the epidemic, in order to ensure that preparedness and response are adapted to local circumstances and do not produce unplanned negative consequences.
- (iii) Tracking and following the nCoV epidemic and response from a social science angle to see what insights come from new interventions in this socio-historical context (e.g. large scale quarantining in megacities).
- (iv) Tracking media and public perceptions of the disease and response in real time to shape not only communications, but also responses across all interventions.

## Outputs and challenges

Participants discussed that the audiences for the research outputs need to be determined accurately. It is less likely that research briefings will shape Chinese government policy as it is currently being implemented but they are of relevance to the international response. When looking further afield in countries where the disease might spread, it is important to identify who the audiences will be and what contribution is most needed. Participants discussed the difficulties of conducting research in China by foreign social scientists, especially in a time of national crisis. It is important to appraise what research is currently possible and taking place in China.

**With these caveats in mind, the following areas for research were identified in the roundtable:**

- Exploring community-level feedback, rumours and 'misinformation', and assessing the best methods to track and synthesise these, and to harness findings to better inform responses in an effective feedback loop.
- Understanding how geopolitics affects the governance of public health and public health responses.
- Understanding how the imaginaries of previous crisis and epidemics shape the response in different contexts.
- Understanding how key actors frame what constitutes a global health crisis and how such a decision is made.
- Understanding how different actors deal with uncertainty.
- Synthesising evidence to consider how an outbreak might be managed in places that are less 'prepared' and resourced than China.
- Learning from previous epidemics (and the ongoing one as it unfolds) regarding the effectiveness of different kinds of quarantining, social isolation and detection measures, and how these interact with the local political economies.
- Identifying the role of civil society in enabling different kinds of public health responses.
- Synthesising existing research on the implications of banning 'wet markets', and advocating for better regulation in order to avoid trade going underground.
- Understanding what evidence is used in decisions to restrict travel and trade and what factors influence these decisions.
- With outbreaks, the 'mover' is as much governments as the virus. Thus investigating the impact of the disruption that the response itself generates is an important area.
- Identifying 'fault lines' between social groups that might widen in outbreaks - this can be done in advance of the epidemic to foresee stigma and discrimination, and to engage with marginalised

groups during preparedness plans. Methods include context analysis and rapid ethnographic fieldwork, identifying health seeking practices and identifying other relevant socio-cultural practices.

- Identifying how social cohesion manifests, and what factors might build or erode social trust in different settings.
- Understanding local forms of resilience vis-à-vis the impact of the disease and the activities of the response.
- Understanding stigma and how it comes to build up and manifest in different ways in particular settings, and how this should inform preparedness plans.
- Identifying the lessons to be learnt from a public health intervention in a large city in a significant crisis, and what elements are relevant to other contexts with different political economies.
- Identifying the lessons learned for future epidemic preparedness, and how to balance preparation with measured responses. Analysis is necessary to see how the current outbreak might shape understandings and discourses of preparedness. Social scientists should engage in order to feed in critical insights related to the effects of public health responses.
- Identifying the ethical challenges that emerge from epidemic response.

## Meeting Participants

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## About the Social Science in Humanitarian Action Platform

There is increasing recognition of the need to engage more deeply and systematically with the social, political and economic contexts of humanitarian crises. Poor understanding of these dynamics and limited integration with local contexts can contribute to additional costs and harm. The Social Science in Humanitarian Action Platform (SSHAP) promotes the use of social science evidence and expertise in humanitarian response. SSHAP works with networks of social scientists and historians with regional and subject expertise to rapidly provide insight and analysis, in order to assist better design and implementation of emergency response interventions. We aim to shed light on critical cross-cutting questions related to humanitarian crises. SSHAP is a partnership of UNICEF, The Institute of Development Studies (IDS) at the University of Sussex, Anthrologica, and the Rapid Support team at the London School of Hygiene and Tropical Medicine. The platform has recently received additional funding from the Wellcome Trust and the UK DFID.

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