

## Covid-19: What can public health organisations learn from crisis management approaches?

Nikolaos Sapoutzis<sup>1,2</sup>, Laura Corazza<sup>2</sup>, Marjo Wijnen-Meijer<sup>2</sup> \*

<sup>1</sup>Public Health Department Hochtaunuskreis, Bad Homburg vor der Höhe, Germany

<sup>2</sup>Technical University of Munich, School of Medicine, TUM Medical Education Center, Munich, Germany

\***Corresponding Author:** Marjo Wijnen-Meijer, Technical University of Munich, School of Medicine, TUM Medical Education Center, Munich, Germany

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### Abstract

Covid-19 is an unpredictable event, defined as a public health crisis, and has a potentially catastrophic effect on the health status of the population. Through crisis management, governments seek to minimize negative consequences, while responding quickly and with high quality. It is a dynamic decision-making process with three phases to respond to a crisis: the pre-crisis phase, the crisis phase, and the post-crisis phase. During the Covid 19 crisis, the health care system was hit the hardest. Especially due to the increase in infections, the burden on the health system increased and the health care system was in danger of failing. By analyzing the first two phases of crisis management - the phase of prevention and preparation and the phase of response to the crisis - in different countries, it is clear that communication with stakeholders and the population is crucial for people's behavior during the crisis. Communication may cause people to panic and lead to further infections, or they can make informed decisions about their health-protective behavior and therefore accept restrictions on their privacy to escape restrictive bans. The post-crisis phase is of central importance, to learn from the crisis and to protect public health in the future. In this context, it is necessary to reflect on the way the population receives information and the communication strategies of governments. It could be seen as an opportunity for public health organizations to improve crisis management tools and roadmaps.

### Introduction

Different types of crises affect the health status of populations [1]. A crisis is an unpredictable event, such as a new or emerging infectious disease, wars, or sudden natural events [2,3,4]. Globalization caused the emergence of global public health crises to increase rapidly in recent years. Examples of global public health crises are climate change, biodiversity loss, rapid unsustainable urbanization, refugee surges, terrorism, war, pandemics, and the global rise of resistant antibiotics [5]. These crises have potentially catastrophic effects on individual health, resulting in direct or indirect mortality and morbidity of the affected population [2,4,5]. These health crises caused severe damage, human suffering, and high costs worldwide [6,7].

In March 2015, the United Nations (UN) adopted the Sendai Framework for Disaster Risk Reduction 2015-2030, the goal is to reduce the disaster risk at local, national, regional, and global levels through international, regional, subregional, and transboundary

cooperation. One of the priorities is to improve the resilience of national health systems [8]. Health systems, according to WHO, are "all resources, organizations, and institutions devoted to the formulation of interdependent actions aimed primarily at improving, maintaining, or restoring health" [2]. Steier and Moxham describe the Load-to-Capacity model of health care systems: the system is balanced as long as capacity can meet the load, but if the load grows substantially, health care delivery fails and governments try to readjust health care budgets to meet the acute need [9]. The following factors are interdependent for a resilient health system: Health providers, health workers, health information, medical products, technologies, vaccines, health financing, governance, and leadership [1,10].

In order to get a grip on this kind of public health crisis, an understanding of crisis management can be helpful.

### What is crisis management?

Crisis management is being defined as "a set of factors designed to combat crises and to lessen the actual damage inflicted by a crisis" [11]. Crisis management does not mean preventing crises, but minimizing negative consequences, responding quickly and with high quality, and being prepared for crises of all kinds [12]. Based on the

literature on emergency preparedness, crisis management consists of four interrelated factors: Prevention, Preparation, Response, and Revision [11]. These factors are incorporated into a widely used approach in which crisis management involves three phases, to make the crisis management process a dynamic decision-making process

[5,7,11]. The goal of this is to develop resilience to (future) crises [13]. Phase one is the pre-crisis phase, it consists of prevention and preparation for the upcoming crisis. Here, it is necessary to know the cause and how to strategically manage and prevent it tactically [5,11,14]. The second phase is the crisis phase, the response to the

### How was crisis management handled during Covid-19?

Currently, the emergence and rapid global spread of the Covid-19 virus (SARS-CoV-2) is causing a worldwide crisis with health, economic, political, and social consequences [15]. Due to exponentially increasing patient numbers, the pandemic poses an unprecedented challenge to countries' healthcare systems [16]. Their countries' crisis management shows if they can handle the additional public health challenges [10, 16].

During a public health crisis, crisis management includes five factors to overcome a disaster. "(1) Disclosure of information about the cause; (2) Assessment of hazards and threats; (3) Establishment of information channels; (4) Creation and implementation of strategic crisis action plans; (5) Mobilization of critical resources" [17]. These factors are strongly focused on communication and have critical importance during the pre-crisis phase and preparation for the subsequent crisis phase [17,18]. The key component for success in dealing with a crisis is inter-and intra-organizational communication, networking among all stakeholders and with the population [14,19]. Especially during health crises, the population needs quality information to understand the decisions made by the government. So that they can make informed decisions about their health-protective behavior [4,7,20]. The example of China illustrates the impact of inadequate communication with the public and neglect of the five factors of crisis management. At the beginning of the Covid-19 outbreak, the Chinese government did not adequately inform its own population and the world about infectious diseases. Because of their strong media control, officials were late and slow in responding to the outbreaks, which led to panic among its own population, and more people got infected [17,18].

### Outlook for communication crisis management

The population obtains information through a variety of formal and informal sources, including the Internet, newspaper, family, friends, colleagues, and social media [4,19,22]. In this context, excessive media exposure can have an impact on physical health, for example, leading to increased distress, stress, or worry [20]. Another major challenge in the crisis communication system is social media platforms and thus the transmission of misinformation [4,23,24]. Based on experience during the Ebola outbreak, Carney and Weber stress the importance of "public health intelligence" to ensure that all stakeholders are well informed and do not have to depend on hard-to-control news sources, such as social media [25]. It is necessary to correct misinformation; therefore, the credibility of the source is crucial. Influential sources of information include government health agencies, news media, and social peers. Social peers are peers or peer groups in the population who share more accurate information [24].

crisis. The last phase is the post-crisis phase it consists of recovery and rehabilitation [5,11].

The crisis managers in public health crises are the governments of each country [9].

In phase two of crisis management, the crisis phase, measures restricting public life have been introduced worldwide to combat the Covid-19 pandemic. These measures are designed to prevent the overload or collapse of health care systems [9]. These include wearing face masks, adhering to social distancing, widespread testing, diagnostic capacity, contact tracing, mandatory quarantine, and partial border closures [9,16,21]. Using South Korea as an example, it is possible to see the importance of communication in crisis management. The government took a reactive crisis management approach. Instead of restrictive bans, the economy and borders remained open [16]. Instead, they used digital surveillance technologies to track contacts. These technologies were an invasion of citizens' privacy, which the population in South Korea tolerated because they were very well informed by the Center for Disease Control [16].

Especially during public health crises, the public needs a lot of information [4,19,22]. This is a major challenge for public health agencies and policymakers because little information is available about emerging diseases and the public cannot be fully informed [1,4]. Information that is difficult to access, contradictory, or ambiguous leads the public to have an elevated perception of a hazard [4,20,23]. This creates differences in media portrayal and crisis reality [7]. During the Covid-19 pandemic, it caused a stress reaction of the population, behavior emerged which was not recommended as a reaction to the actual danger, such as panic buying of consumer goods like toilet paper, water bottles, or hand sanitizers [20]. This highlights the importance of journalists and the need to meaningfully integrate them into the government's crisis communication system [7].

Urgent information should be communicated in real-time, especially during a crisis, to avoid speculation and misinformation [20].

Public health will continue to be threatened by infectious diseases. In addition, crises in contemporary societies are more difficult to manage due to globalization and the availability of many different information sources. Therefore, the third phase of crisis management, the post-crisis phase, takes central importance [6,11,26]. This involves reflecting on how the current pandemic was handled in the pre-crisis and crisis phases to better protect public health in the future. By evaluating the crisis communication strategy, organizational changes should be done to avoid risk amplification and the sharing of misinformation in the future.

## Conclusion

As in any crisis, communication with different stakeholders, such as policymakers, the population, and health care workers, is crucial. In the post-crisis phase, an evaluation should be made of how this turned out so that lessons can be learned for a future crisis. Questions that can be asked are: were all those involved (e.g., different population groups) informed adequately and timely, which channels worked well for which group and which ones not so well, to what extent is the Sendai Framework for Disaster Risk Reduction from the United

Nations applied? Since this crisis affected all countries, it would be very valuable to compare different strategies and their effects. All countries should enhance preparedness and be able to respond to the next public health crisis. “A threat anywhere is a threat everywhere,” therefore international collaborations and communications should be improved in order to address disasters that can expand globally [26]. This pandemic can be used as an opportunity to improve crisis management tools and roadmaps for public health organizations.

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