Editorial: Emergency, crisis, and risk management: Current perspectives on the development of joint risk mitigation, preparedness and response efforts

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Editorial on the Research Topic
Emergency, crisis, and risk management: Current perspectives on the development of joint risk mitigation, preparedness and response efforts

In the book Ancient Mesopotamia: Portrait of a Dead Civilization, Oppenheim (1977) describes the old priest-like group, the *Asipus*, who lived in the Tigris-Euphrates Valley. In around 3200 B.C., they were widely known as the first risk analysts. Upon being approached with a problem, they performed probability and consequence mapping, and devised a solution based on their alleged contact with the gods. Although religion and superstition have been closely linked to emergencies and crises throughout history, most modern societies now follow a more analytical, rational, organized and fact-based approach to managing emergencies and crises.

There is an assumption that well-organized crisis management and communication processes reduce vulnerability and help communities cope with hazard-related situations. The problem is that when a crisis occurs, individuals and public and non-governmental organizations tend to prefer standardized and well-known approaches. As a result, they often end up overwhelmed and paralyzed, as they experience difficulties adjusting sufficiently quickly to new situations (Boin and Bynander, 2015). Sources disagree as to exactly why this is, but possible reasons include problems related to vast bureaucracies and decision hierarchies, insufficient knowledge, and failure to prioritize and develop strategic learning aspects of exercises (Berlin and Carlström, 2014). As a result, many stakeholders struggle to meet societal expectations, develop resilient frameworks and find more effective joint solutions.

In this Research Topic, 58 authors have contributed to 12 articles, adding to the development of joint risk mitigation, preparedness and response efforts.

As we are still battling an ongoing COVID-19 pandemic, the focus on a different aspect of public health emergencies has been the most evaluated. As a point of departure, Khorram-Manesh et al. found that armed conflicts are unavoidable with the increasing number of public health emergencies combined with the lack of vital life elements such as water and food. Further, when conducting a knowledge mapping analysis of public health emergency management research for 2007–2020, Yang et al. reported that the research could be divided into three main periods: exploration, growth, and outbreak. By examining the studies chronologically, the study also found that the research has evolved, from examining medical and care aspects related to significant diseases, to focusing more on the management aspect as risk assessment and governance, before currently focusing on the ongoing pandemic.

The COVID-19 pandemic has presented national and international crisis managers with complex and unique challenges. Despite past outbreak experiences, the international community has faced difficulties in joint strategy development and coordination. Governments have been criticized for sub-optimal resource allocation, varying communication strategies and imperfect multiagency collaboration. In their research on healthcare facility resilience between 2000 and 2020, Li et al. found that the research had gone through three main development periods, and that the involved countries and institutions were scattered. Nakahara et al. also addressed healthcare resilience by studying the Japanese healthcare delivery system. Findings showed that, whilst the country's healthcare resources are comparable with other high-income countries, securing beds for patients diagnosed with the coronavirus has taken time. Reasons identified included slow resource allocation, inadequate legal frameworks and a lack of mechanisms for collaboration.

Collaboration is a horizontal and prestige-less effort between stakeholders to solve a common problem (Berlin and Carlström, 2014). However, one of the hallmarks of a crisis is that, compared to everyday emergencies, it requires an immediate response. It quickly strains and overwhelms existing resources. There often arises, therefore, a need to find ways to increase the efficiency of mass dispensing. A common approach in health emergencies is to create points of dispensing (PODs), sites where the government can provide temporary medical services and medications. Alghanmi et al. found that, although effective, there was a need to develop different POD techniques and approaches to meet the demand of groups and populations.

Authorities depend on a compliant public being willing to follow guidance and collaborate, and such willingness requires a basic level of social trust. As pointed out by Reiersen et al., trust can "become a double-edged sword" during a crisis. Drawing on data from 127 countries, the researchers concluded that "the number of COVID-19 deaths decreases with trust in government and trust in science, while the number of COVID-19 deaths increases with social trust" (abstract). The importance of collaboration, more on a national level, was also addressed by Sommer et al.. Their review found that each EU country within the Meuse-Rhine Euroregion addressed the pandemic individually, and that cross-sector collaboration between regional actors was almost non-existent during national policy formulation and decision making.

As COVID-19 has taught us, a global pandemic is not a health problem; it also impacts other parts of our societies and sectors. Therefore, all societies and organizations must mitigate and prepare for a new or similar event, or, to put it another way, they need to build a basic level of resilience. In their contribution, Evenseth et al. explored the promotion of organizational resilience (OR) through the achievement of organizational learning. Their systematic review found that learning was connected to the three OR stages—anticipation, coping and adaptation—and that effective learning depended on appropriate management, systematization and organizational ability. The importance of inner organizational life during the pandemic was also addressed by Sørensen et al., who examined employees' perceptions of organizational crises and their reactions to them in a case study. The results showed a strong belief in the organization's overall resilience level, but a somewhat vague understanding of knowledge, roles and responsibilities resulted in some signs of informal communication and insecurity. Although more challenging in times of crisis than in everyday emergencies, striving to communicate factual knowledge should always be a priority for both authorities and individuals. In today's globalized society, the role and impact of, for example, social media should never be underestimated. As stressed by Chao et al., who in their research article pointed out how the spreading of rumors on social media may have a significant impact on societal order and development, it is of utmost significance for crisis managers to debunk fake information in order to ensure effective crisis management processes.

The differences in and importance of knowledge were also examined by Ochiai et al., who identified significant differences in knowledge and awareness between different working groups, which resulted in, for example, differences in work-willingness and risk-taking. On a darker note, Luo and Qi's analysis of data on 1,825 terrorist organizations recorded in the Global Terrorism Database showed that terrorists were also on a constant quest for knowledge, and were found to study and learn from the experiences of pre-existing terrorist organizations.

The papers published on this Research Topic show the diversity of opinion within the field of crisis management. As the world in which we live becomes increasingly globalized, the need for collaborative thinking and competence-sharing becomes increasingly important, especially when mitigating and responding to events across organizational, national and

international borders. We therefore argue the need for a more unified and collaborative global approach to crisis management.

Author contributions

JS wrote the editorial. JB, LN, and EC contributed with comments to the cited papers and references. All authors contributed to the article and approved the submitted version.

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