We Didn’t Win the Battle, but We Are Gonna Win the War!

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Abstract
Funding is not always essential for performing good and relevant research, but it helps. Funding frees additional time and resources, as well as co-production and co-creational processes that may not be available to individual researchers alone but may grow from larger research collaboration. In 2019, we were both involved in an application for funding of the development of a Critical Pandemic Response (CPR) exercise. The aim was to improve multinational preparedness, cooperation, collaboration and response to the possible spread of public health risks and test a validated exercise model. The case was a pandemic. At the last minute, we were unable to apply due to unexpected causes. Little did we know how spot on our initiative was back then with the COVID-19 outbreak in December 2019.

Keywords
crisis management, research, COVID-19, funding, exercise

Introduction
The Cambridge Dictionary defines research as “a detailed study of a subject, especially in order to discover (new) information or reach a (new) understanding”. Research can find the answers to what yet is unknown, fill in gaps and blanks, and help theorists and professionals come up with the best solutions and practices. In other words, research represents development.

Throughout history, there have been examples of researchers that unintentionally and accidentally have made discoveries that have changed the world. An example is the German physicist Wilhelm Röntgen. While working with a cathode ray tube in 1895, he noticed, when placing his hand in front of the tube, that he could see his own bones at the screen. The discovery led to what we today know as X-rays. This is however rare. Another is the Hungarian physician and scientist Ignaz Semmelweis who discovered that childbed fever, and subsequent deaths primarily caused by doctors, could be drastically cut by the use of hand disinfection. Semmelweis also personally experienced the costs of discovery, when they are against the reigning scientific “establishment” at the time. Thus, in addition to new discoveries being a result of long, expensive and painstaking work, they also depend on a scientific resonance.
Funding is not always essential for performing good and relevant research, but it helps. Funding frees additional time and resources, as well as co-production and co-creational processes that may not be available to individual researchers alone but may grow from larger research collaborations. Some research is funded by charitable foundations and individuals with a majority coming from national public sources and entities (e.g., research councils). Internationally funding is also available through, e.g., EU’s Horizon Europe program and the Nordic Council of Ministers (NordForsk) program.

Funding is awarded after a competitive process where potential projects are evaluated. The most promising projects receive funding. In 2019, about 13 per cent of proposed research applications to the Norwegian Research Council received funding (NRC Annual Report, 2019), while the success rate for the EU’s Horizon 2020 program was approximately 16 %.

Developing a well-written research project proposal is an art, as it is both time-consuming and challenging. It is far from enough just having a great idea. The research team must also, often in a space-limited project template, document criteria of excellence, impact, implementation, relevance and collaboration with other relevant stakeholders. It is far from unusual to put down several hundred hours of effort.

How applying for funding for issues of vital importance does not necessarily end in funding but fuels future research and practice

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The ongoing COVID-19 pandemic tests national and international crisis preparedness to its utmost. Many countries report the lack of personnel, equipment, and guidelines to tackle the major consequences of the virus. Despite heroic efforts from healthcare-workers, communities and governments, the world is currently experiencing a crisis. A crisis is here defined as a situation that overwhels everyday capacities and resources, and goes across administrative, organizational and geographical borders (Ansell, Boin, & Keller, 2010). It is too soon to conclude on what could or should have been the best solutions to reducing both national and international consequences of the Corona-outbreak. However, which also is the aim of this essay; it can be, from a Risk Governance perspective, possible to point to some observed symptoms that may explain why crisis preparedness efforts are currently challenged. In the following, we share thoughts and ideas about pandemic challenges, as seen from the governance of risk, in general, as well as from multiagency efforts and policing especially.

**Risk Governance**

Risk Governance consists of the processes of identifying, assessing, and controlling risks (Bullock et al., 2017). The goal is through risk-related decision-making to prevent or reduce the impact of manmade, natural or hybrid hazards (Van Asselt & Renn, 2011). However, before countermeasures can be planned and implemented, values must be assessed, threats need to be identified, likelihood must be established and consequences need to be outlined. By nature, it is not possible to predict or foresee all types of risk. Further, there are many different types of vulnerabilities. Risk mapping should therefore not be limited towards lack-
ing or non-existing countermeasures. It is just as important to assess the level and effectiveness of already in-place actions. Types of vulnerabilities include physical, technological, social, organizational, and human. The last three will be further discussed here.

Social
Social vulnerability is here defined as the overall response capacity of a society (Cutter et al., 2009). There is a tendency in hazard mitigation planning to often focus on physical and technological vulnerabilities. It is just as important to focus on population groups especially vulnerable due to e.g. poverty, age, disability, and socioeconomic factors (FEMA, 2020). As documented during the Corona-outbreak, the 65+ age group make up about 72 per cent of the total share of death (Worldometers, 2020). As elderly for years have been identified as especially vulnerable when crisis strikes by the WHO (2002), the high number of death tolls may indicate that targeted mitigation efforts should have been implemented at an earlier point in time.

Organizational and societal
Vulnerability of organizations is the ability organizations possess to mitigate, respond to and master existing and new threats (Norwegian National Security Authority, 2017). Examples are the development of overall strategies, plans of actions, risk assessments and development of aviation systems. The possibility of a pandemic outbreak has for years been identified as one of the international top-risk scenarios. Still, the ongoing outbreak has been described as a “black swan”. As the latter also has been contested, what remains is that predictions do not in themselves create preparedness.

Pandemic outbreaks are often overwhelming and overstrain national and international capacities and resources. The 2009 H1N1 influenza pandemic, the first of the 21st century, proved how very quickly a new virus can spread to every corner of the globe. There are several other examples of such outbreaks, including the 2002 SARS outbreak, the 2015 Middle East respiratory syndrome (MERS) outbreak in South Korea, and the 2014 West Africa Ebola epidemic. The last resulted in a total of 28,616 cases of Ebola Virus Disease (EVD) and 11,310 deaths in Liberia, Sierra Leone and Guinea. Additionally, 36 cases and 15 deaths occurred in other countries (Centers for Disease Control and Prevention, 2016). Several key international legal instruments govern pandemic management in the European Union (EU). Examples being the International Health Regulations (WHO, 2005) and Decision 1082/13 Pandemic related to cross border crisis and disasters. Still, we have during COVID-19 witnessed multiple national examples of personnel, locality and equipment shortage. In addition, there has been examples of discussion and stated confusion related to best practices and approaches. Understandably, it is difficult to fully prepare for a virus such as COVID. However, the reported under-sizing may indicate that the follow-up of identified risks has been inadequate both nationally and internationally. It should be noted that decisions have been made. Due to political and policy concerns, decisions have for instance emphasised less national and more global production and supply of different types of pandemic equipment. Crises, such as a pandemic, may act as an initiative to change. Thus, it may be that we will be witnessing a shift in this argumentation.

Human
Human vulnerabilities in this context involves the human aspects of being able to mitigate, prepare for, respond to and recover from threats. Examples of human threats include a lack of understanding, inadequate training, wrongful or misuse of equipment and procedures,
and human error (Norwegian National Security Authority, 2017). The last is not necessary a deliberate action but is an inherent part of being human; we err. The aim is to diminish this variable though systems that constantly remind us that our own behaviour is a risk. Despite global public advice from WHO against the Coronavirus, there is ample media coverage on individuals, even in prominent positions, that disregard or choose to act against these same advices. Human error excluded, the reasons why some chose not to follow WHO recommendations are probably several. Examples may include personal, cultural or psychological factors. On the other side, it may also be a symptom of lack of belief in expert information.

When international crises occur, they require a higher degree of cross-border coordination and collaboration (Berlin & Carlström, 2009). An example of such multinational effort was the EU response to the Ebola outbreak, which included monitoring, collective actions, and mobilization of financial, scientific, and political resources. EU expertise also helped neighbouring countries at risk and ensured crisis preparedness measures (e.g, European Mobile Laboratories). Achieving and maintaining well-functioning and effective coordination and collaboration during crisis processes is however challenging.

There exists an assumption in crisis management that crisis collaboration exercises test and develop cross-sector integration, preparedness efforts, and response (Rutty & Rutty, 2012). However, new academic research indicates that exercises tend to produce results with limited utility value in real crises (Berlin & Carlström, 2009, 2015; Kristiansen et al., 2017; Magnussen et al., 2018; Sørensen, 2017). Sources to date are conflicting as to why the utility value of collaboration exercises is limited, but cited reasons range from having to deal with bureaucratic and administrative barriers (Berlin & Carlström, 2009), to failing to prioritize utility learning (Stein, 1997). Research further indicates that having too large gaps between formal and actual organizational policies (Meyer and Rowan, 1997) affect collaboration development. Not engaging in sufficient collaboration in crises could make it harder for crisis managers to impose order (Boin & Bynander, 2015), deal with consequences (Salman Sawalha, 2014), and ensure necessary resilience, flexibility, and efficiency (Jung & Song, 2015). In the following, we describe the exercise Critical Pandemic Response (CPR) exercise.

The exercise

The Critical Pandemic Response (CPR) exercise is designed to improve multinational preparedness, cooperation, collaboration and response to the possible spread of public health risks, with particular emphasis on the three vulnerability levels. An important exercise objective is to provide a realistic testing environment that tests the implementation, and use of national and international measures and support, including activation of the EU Mechanism (UCPM). Further, and just as important, CPR will provide a learning opportunity for multiagency collaboration. This is done by providing and testing the validated Three Level Collaboration (3LC) exercise model, which is especially designed to improve collaboration learning and usefulness. Through multiagency collaboration, the 3LC model brings employees from different organizations together in seamless overlap with each other’s complementary and cooperative work tasks. The 3LC technique has been developed and scientifically validated by including asymmetries in the scenarios, inserting time-outs during the exercise, repeating operative elements, and performing several seminars.

The CPR provides a realistic scenario designed to overwhelm and overstrain available resources and capacities. CPR tests procedures and increases the multinational ability to
handle a possible spread of public health risks. Further, the exercise tests response and preparedness capacities and, enhances the familiarity with UCPM. CPR establishes and tests multinational and multiagency operational concepts and procedures to enhance participants’ learning. The multiagency exercise strengthens the coordination of civil protection assistance interventions by ensuring improved comparability and interoperability between the intervention teams and other intervention support stakeholders. In addition to structural aspects of how and whether the police cooperates in a crisis response, particular focus is directed at enabling scripts that include multiagency interaction. This implies that the focus not only is directed at dealing with the pandemic response itself, but also securing that the exercise itself opens up for collaboration (e.g., involvement of correctional services).

The design of the CPR exercise was so pertinent that it developed into a natural experiment. Now, it is time for research and practitioners to dedicate time and efforts to harvest new knowledge about multinational preparedness, cooperation, collaboration and response to the possible spread of public health risks based on the current outbreak. Then, we can potentially come closer to testing the CPR exercise model when the next wave hits our shores.

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