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Regular Article

Covid-19: A crisis that puts our model of crisis management to the test

Aline Thiry [a,*], Kim Hendrickx [a,b], Pierre Ozer [c], Sébastien Brunet [a], Catherine Fallon [a]

[a] Université de Liège, Département de sciences politiques, Faculté de Droit, Quartier Agora - Place des Orateurs 3 - Bat. 31 - Bte 8, 4000, Liège, Belgium
[b] FNRS - Fund for Scientific Research, Belgium
[c] Université de Liège, UR SPHERES, The Hugo Observatory, Avenue de Longwy 185, 6700, Arlon, Belgium

Our routines and everyday habits have been, to say the least, completely shaken by this pandemic that burst into our lives … New social habits are slowly taking form here and there, but with great differences depending on our various situations in terms of family, gender, occupation and social position. The virus is emphasizing the various inequalities in societies across the globe …

Yet we should not be so surprised by the outbreak of the virus and its impact on our daily lives – our current crisis situation. Lakoff (2017) already warned that emerging diseases would be caused by pathogens spreading rapidly and creating situations of global pandemics, due to the connections between ecosystems and places with high population density and the rapid global circulation of people, goods and animals (Fallon and al., 2012). What is truly puzzling, and deserves further reflection, is that we seem to have been taken by surprise, even though a pandemic had been clearly anticipated since many years. In what follows, we discuss the case of Belgium: a country that has been hit severely by the COVID-19 pandemic, despite its outstanding crisis management infrastructure and level of preparedness. On January 29, 2021, 21 081 deaths from coronavirus were recorded for Belgium (Sciensano, 2021). This means a rate of 1806 deaths/million habitants. The country was ranked among the highest coronavirus-related mortality rate (Worldometer, January 2021) and the death toll was twice as high as compared to its neighbor countries in Western Europe. In June 2021, Belgium ranks twelfth in the world in terms of coronavirus deaths per million habitants - ahead of Italy in fourteenth place and the UK in nineteenth place (Worldometers, June 2021).

What happened? Is it due to the federal structure of the country's government? Other federal countries such as Germany and Canada, whose federal structure is often compared to Belgium, managed remarkably well during the first wave of the pandemic. We identify two other possible reasons for the severity of the COVID-19 crisis in Belgium. First in January 2020, the Belgian federal government was itself entrapped in a long political crisis: being in current affairs prevented it from taking strong measures at the very beginning of the pandemic and to coordinate with the subnational entities. The second reason is of a more fundamental nature: the crisis we are facing exceeds the framework of crisis management which was not ready to face a pandemic. Both reasons point to a hiatus at the heart of the crisis management infrastructure Belgium is so proud of: the difficulty of learning from the past and preparing for the unknown future.

This paper proposes to frame the argument (1) first in terms of crisis management which was professionally and consistently developed since the 1960s on the whole territory. This is then (2) discussed with the transformations imposed by the last state reform leading to a new repartition of public health competences between the federal and the subnational entities: these changes were not yet fully endorsed at the start of the pandemic and they were further affected by a federal political stalemate impeding collaboration between the national and subnational entities in federal Belgium. The third section (3) presents the unfolding of crisis management during the first wave of Covid 19 (January–June 2020) and uses the stepwise framework as inspired by Boin (2009, 2021).

The authors have been active in the field of crisis management for the last ten years: they mobilized the information gathered through documentary analysis (official documents, administrative reports and media) and discussions with lead partners professionally engaged in the field (reported in Fallon and al., 2020).

1. Professionalization of crisis management

Industrial states have learned dancing on a volcano, trying to master the threats posed by technological developments and to control the impact of natural hazards for our increasingly complex societies to ensure public health and to protect the population (Beck, 1992; Bernstein, 1996). As the guardian of the population's well-being, the state developed civil protection policies and cooperation between the field

* Corresponding author.
E-mail addresses: aline.thiry@uliege.be (A. Thiry), khendrickx@uliege.be (K. Hendrickx), pozer@uliege.be (P. Ozer), sebastien.brunet@uliege.be (S. Brunet), catherine.fallon@uliege.be (C. Fallon).

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professionals to improve prevention, preparedness, response and recovery to disasters, by mobilizing adequate resources in case of industrial accidents and/or environmental catastrophes. Emergency management (EM) can be defined as "*the coordination and integration of all activities necessary to build, sustain and improve the capabilities to prepare for, respond to, recover from, or mitigate against threatened or actual disasters or emergencies, regardless of cause*" (Department of Homeland Security, 2007, p. 9) and its scope covers all types of hazards. In order to face an emergency situation, several organizations with different levels of involvement, capacity and performance are mobilized. Boin (2009) posits that crisis response capacity relies on the quality of the professional organizations but also the quality of inter-organizational relations in the crisis management network. Each crisis being unique, each intervention network is likely to be unique when facing an exceptional situation full of unexpected elements (Boin, 2009). Good EM is based on building working relationships and trust between involved organizations and the development of routines for adequate communication: the quality of the EM as a "policy regime" depends of the development of informal trust building practices as well as on institutional developments. The latter are particularly important in federal countries, as they define specific conditions of cooperation within the constellation of emergency actors enmeshed within the political entanglements between subnational entities and the federal state (Carter & May 2020).

European countries have developed crisis infrastructures nourished and enriched by the lessons learnt from the various crises the countries went through as well as under European pressure (mainly with regard to industrial accidents[1]). In Belgium, the competence for EM is federal and the legal frame (last modified in 2019 integrating the lessons of the 2016 terrorist attacks in Belgium) has since 2006 harmonized the terminology and content of emergency plans, imposing a multidisciplinary approach and risk analysis into the planning process, with the objective of organizing the fastest possible reinforcement of intervention capacities. The building of more or less catastrophic scenarios is part of this preparedness. Plans and scenarios serve as a reference when responding to a crisis which is, by definition, always unpredictable. Emergency planning supports the coordination and thus the strengthening of skills and the development of effective responses to protect people and their property in the event of an emergency. Emergency planning also has a political function; the uncertainties that are known to be inherent in a crisis situation are somehow concretized, almost reified in an official written document, namely the plan (Brunet and al., 2019). The materialization of risks and emergency situations in the plans have a reassuring function for the actors concerned. Behind the formulation of an emergency plan, one can identify an eminently political message that is meant to reassure people: plans contribute to legitimize existing policies through the notions of risk and security, supporting its capacity to manage the impact of hazards threatening the community (Fallon and al., 2008, p. 3).

Several authors point to important changes in crisis and disasters in terms of nature and consequences, as a result of the combination of various developments such as climate change, technological complexity, economic interdependence, globalization, etc. Our societies are confronted with crises that no longer fit into our working hypotheses nor our traditional operational scripts (Guilhou & Lagadec, 2006). "*We need to think of crises no longer as well-identified accidents in a globally stable and controlled world, but rather as the central driving force of worlds increasingly traversed by unpredictability, discontinuity and chaos*" (Lagadec, 2009, p. 2, *our translation*). To be solved, crises beyond established frameworks call for new and constantly renewed responses. "*We need to be prepared for emerging crises that respect no borders. Discontinuity, ignorance, the unreadable radar screen, the unthinkable become normal difficulties.*" (Guilhou & Lagadec, 2006, p. 33, *our translation*). These new threats show a much stronger potential for crossing boundaries, "*exploiting the linkages between functional and geographical domains*" (Boin, 2009, p. 368). They pose new challenges to the politico-administrative authorities to develop adequate crisis management programs. Globalization and the complexity of worldwide and transfunctional networks have made the world "flat" and contribute to the acceleration of propagation of the threat and transform the dynamics of the crisis. This rapid spreading is not without consequences for the authority in charge of crisis management: international organizations versus national states and also between the administrative sectors themselves.

The risk of a pandemic has been clearly anticipated in most countries in terms of EM. In November 2005, the WHO established a global program to fight influenza, drawing lessons from the Severe Acute Respiratory Syndrome (SARS) episode in 2003. All member states were called upon to prepare for such a scenario and to warrant emergency measures to provide maximum protection and preparedness, in line with the International Health Regulations (IHR) imposing the signatory states, including Belgium, to put in place action capacities to detect and contain local epidemics, as well as to be able to apply the necessary sanitary measures in the case of pandemics. This call was updated in 2009 in a guidance document entitled "Pandemic Influenza Preparedness and Response", built on lessons learned in the management of avian influenza A (H5N1). For its part, Belgium developed a pandemic plan in 2006, as did most other European countries. But this plan was somehow "lost in translation" as it did not adequately adapt to the numerous institutional reforms redistributing the political control on health care capacities and public health resources. The Pandemic Influenza Preparedness and Response did not survive the institutional reforms in federal Belgium.

1.1. Federal Belgium: between state reforms and political stalemate

In the face of a pandemic, federalized countries are confronted with the same threat throughout their territory and this challenges the link between federalism and crisis management of the Covid-19 pandemic. Federal structures are praised for policy diversification, ensuring that political priorities and specifics of each territory are taken into account. Intervention logics can be decided on the basis of local conditions and resources, while political proximity helps to strengthen support for the public concerned by these measures. In the case of a pandemic, the Belgian federal system faces an unusual constraint.

Crisis management in Belgium occurs on two levels: firstly, operational management organizing various interventions on the field, and secondly, strategic management. The federal level mobilizes a large expertise within a response network of interdependent but coordinated organizations around shared objectives in a multi-level approach under the authority of the Minister of Interior with the support of the federal Health Minister. Depending on the scale and nature of the crisis, strategic management occurs at the local level under the authority of the Mayor, at the provincial level under the authority of the Governor or at the national level under the authority of the Minister of Home Affairs. Key factors are the quality of organization, of equipment, but also of communication (between operational actors as well as with the population). Building emergency plans points to the provision of adequate material and human resources in case of emergency and helps developing a comprehensive approach, thanks to stronger coordination between the intervention groups and with the other stakeholders. In the case of medical support, the plan defines the method to deal with an exceptional health situation or a danger to public health. The emergency medicine intervention plans (PIM) and the psychosocial risk intervention plans (PIPS) have been drafted by the federal authority but no health intervention plan (PISA) was yet published as of February 2020. The federal authority has invested in crisis communication infrastructure (ICMS) and a federal crisis center, acting on the whole territory. A recent reform in 2018 reorganized the federal scientific institutes into one sole organization competent for both public and animal health: this reorganization was presented as a rationalization, integrating the WHO-

[1] In particular the European Seveso directives Directive 96/82/CE; Directive 2003/105/CE; Directive 2012/18/UE.

supported "One Health" approach and connected to the European CDC network. Sciensano and the federal administration of health both operate in close collaboration with universities: they have developed a decision management process integrating the university experts in a Risk Assessment Group (RAG) and a Risk Management Group (RMG) acting at the federal level, where the administrations of the three main regions were invited.

The network for *crisis management* – according to the federal law – is organized hierarchically from the federal Minister of Home Affairs down to the local authorities and intervention groups, with the support of professional Governors and the organization of multidisciplinary crisis committees at each level, mobilizing a logic of hierarchical delegation. However, this does not apply so in the sector of health interventions where there is a complex distribution of responsibilities between the federal and subnational entities: public health issues (prevention measures and primary care) are more organized under the authority of the subnational entities while the federal authority only the controls of the organization of secondary care (hospital management and equipment). The last institutional reform further transferred to subnational entities (communities and regions) the political competences related the control of health services organized in places other than hospitals (e.g. in nursing homes).

The competences related to *public health* issues are distributed between federal and subnational entities within the logic of "*dual federalism*": each competence is supposed to pertain to only one entity and each entity operates autonomously. There is no hierarchy between the federal and the subnational governments: any decision transcending one level of government requires a consensus between the federal and all subnational entities. In public health matters, policy must be negotiated and it cannot be hierarchical: many platforms for cooperation have therefore been developed, such as "*Health Interministerial Conferences*" (CIM) associating all ministers. Any agreement takes the form of a memorandum of understanding (MoU) between the federal authority and the federated entities. Responsibilities are by now distributed between 11 ministers: one federal, one in Flanders, two in Wallonia, two for the french-speaking federation and five for the bilingual region of Brussels-Capital (Faniel, 2020). The federal minister can organize an "Interministerial Conference" for health issues (Health CIM) associating the relevant ministers and administrations, but only on a *voluntary* basis: there is no hierarchy between the entities.

The formal cooperation mechanisms in federal Belgium can only be launched when all the actors are present with the executive bodies fully endorsed by their parliaments. However, after the general elections in May 2019, new governments had been installed in the subnational entities. But at the federal level, the elections triggered a long political stalemate: it took 16 months before a new coalition was formed (May 2019–October 2020) and during this interim period no cooperation mechanisms could be launched officially, the federal minority government being in current affairs and waiting for a settlement between the main political parties. During this interim period, the federal Health Minister was not supposed to launch any new cooperation with the subnational entities.

Conflicts of competences can therefore multiply and slow down coordination dynamics, thereby limiting intervention capacities. This is particularly important at the time of the emergence of the crisis, when policy responses are being developed, both in terms of crisis management, health policy and expertise, and unusual decisions have to be made quickly in a space of uncertainty. There is a need for improvisation to adapt quickly to changing circumstances (Boin, 2009). Cooperative practices - formal and informal – are needed for coordination and collaboration between the institutional structures (Kettle, 2000). Both institutional structures and informal practices reinforce the competencies of the federated entities and ensure better coordination: an analysis in terms of "*policy regime*" requires taking into consideration the common objectives, institutional structures and the resources mobilized in favor of these objectives (Carter & May, 2020).

Once the pandemic was recognized internationally, the federal executive received the support from a large majority of the political parties, giving leadership to the federal Prime Minister and full responsibility for her executive to take the necessary measures (sanitary and economic) and to have them enforced on the whole territory within the regulatory framework of federal crisis management. This exceptional transfer of power by the federal Parliament and under its control covered "only" the policy actions deemed necessary for the sectors affected by the crisis and it was supposed to last for three months.

2. A cacophony between the different levels of authorities

Crisis management has always been a "difficult job" coming as a surprise for the political leaders while breaking the routine of state bureaucracies. It is worth addressing some specific points of attention drawing on concepts of crisis management literature (Boin and al. 2005; Boin 2021): preparing for the occurrence of the crisis, making sense of the emerging crisis, managing large response networks, giving credible answers and learning for the future. The paper will propose a brief presentation of these different moments and the problems encountered in Belgium during the 1st wave of the pandemic.

In March 2020, the risk of a pandemic was confirmed by the WHO and the entire national territory was concerned: strategic management was organized at the federal level and decisions applied, by default, to the entire national territory, under the authority of the Minister of Home Affairs with the support of the Minister of Health. The federal strategy was enforced through the Governors down to the local authorities, to ensure the implementation of federal decisions. The federal administration of Health provided technical support to the National Crisis Centre (NCCN) together with the reference agency - Sciensano - which monitors the health of the population. Medical resources such as medical care reserves and hospital capacities were placed under the administrative authority of the Federal Health Inspector. Belgium was for the first time faced with the management of a pandemic on the whole Belgian territory since the federalization of the country.

1. Preparing for the occurrence of the crisis.

"*Preparedness for crisis*" is always expensive in terms of resources but does not lead to strong political awards. "Designing capacities to deal with plausible worst-case scenarios has never been core business of most governing systems." (Boin and al. 2021, p. 12). The comparative work coordinated by Capano and *al* (2020) underlines the importance of policy capacity to face the pandemic, as the set of skills and resources necessary to perform the necessary policy functions. Past experience in pandemics was considered as the best proxy to pandemics preparedness (as was the case in many Asian countries). Other countries had a large confidence in their medical system with no recent experience with pandemics (as in most Western European countries): these countries had less epidemiological expertise and tended to issue late and weaker responses to the crisis. Belgium was one of these.

Although influenza A(H1N1) affected Europe in 2009–2010, its extent was less than anticipated and this episode did not serve as a reminder of the pandemic risk in Europe, unlike SARS and MERS did in Asia (Bretelle-Establet & Keck, 2014). Belgium has neither taken the time nor invested in the resources to support the construction of a collective memory in relation to the risk of a pandemic in the country. In line with the 2006 Pandemic plan, the country had prepared some strategic stocks of individual protection such as masks. In 2019, the Belgian government was faced with the necessity to renew the strategic stock of masks but there was a political decision not to do so, in a logic of budget control. In 2020, the level of preparation in terms of strategic resources were minimal at the federal level as well as in the subnational entities.

2. Making sense of the emerging crisis.

"*Upon emergence*", the coming crisis already gives some vague and ambivalent signals which are problematic to put together to get a comprehensive picture of what is coming. Sense-making is a social process (Douglas, 1986) and individuals engage in collective sense making when interpreting signals (Weick, 1995). This process of sense-making remains critically important throughout the lifecycle of the crisis, particularly in very divided polities when uncertainties about crucial parameters of the crisis are not receiving acceptable answers (Boin, 2021). In complex networks, information flow is often impaired, particularly if there is limited information sharing routines, and it helps explain why 'the dots were not connected'. There were longstanding blackspots in the networks: places with little contacts with the other parts of the network and where the signals were blurred in the upcoming seasonal influenza during the winter months (particularly in elderly nursing homes).

From China to Italy and then Belgium, the transfer of information was large enough to outpace the virus's mobility. Experts, in principle, would have had enough time to learn about the threat and appreciate its potential impact. The expert advisory groups attached to the federal health administration (RAG – RMG) convened in January to follow the situation. At the end of February 2020, epidemiologists from different universities denounced the slow reaction of the authorities while containment measures had been decided in other countries: the country only organized the quarantine of identified infected persons and travelers returning from an infected country. The minister presented the development in Italy as a "small influenza", and epidemiologists speaking too moodily about the situation in Wuhan and in Italy were disregarded as "*drama queens*". Like many government leaders in Europe, the Belgian federal authority declared that the virus was under control in the country until early March, after the end of the carnival holidays and festivities.

3. Managing large response networks.

"*Taking decisions in the face of large uncertainties*" (on the crisis scenario and on its possible consequences) is the difficult mission of the political authorities, once the threat is manifest: they have to manage large intervention networks. Boin (2009) puts at the fore the importance of looking at crisis response as "*a network comprising a wide variety of response organizations that usually do not work together in normal times. An effective response requires increasing interagency and intergovernmental coordination […] (and) depends on such variables as previous interaction and trust between network parties*" (Boin, 2009, p. 372). Each crisis is unexpected and the response network must develop flexible management practices open to improvisation.

When the WHO confirmed the pandemic and asked the states to react accordingly, the Belgian federal government was in a state of current affairs, which strongly limited its margin of maneuver. All the parties in the federal parliament came to an agreement and accepted to support a minority government for three months with the power to take the action necessary to master the crisis and its impacts. The Prime Minister was in charge of the general crisis management but she could not prevent a cacophony between the different levels of authorities, particularly in terms of health prevention. There was a lot of hesitation as to the best strategies to adopt in order to counter the spread of the virus. Should the population be massively tested, as recommended by the WHO? Is it necessary to wear masks even when one is not contagious? The nature of the virus itself was also problematic: even if the virus had a name and its genome had been sequenced, experts have only gradually discovered the risks of viral transmission by asymptomatic carriers. Which strategy was feasible given the available resources?

4. Giving credible answers.

Answers must also be made credible: policy makers must present a convincing rationale to gain public support and adhesion to the measures imposed.

Problematizing the intervention was done in line with federal available resources. Experts and politicians had to manage the consequences of planning failures and the shortage of basic materials. Political leaders pragmatically asserted that the only solution available was the best: "there are no more masks? It doesn't matter, masks are only important in hospitals"; "disinfectant or hydroalcoholic gel is no longer available? It doesn't matter, soap is just as efficient"; "there are no more reagents for tests? No problem, we will test fewer people but more targeted". Shortage of resources combined with the absence of coordination with the subnational authorities. The latter were supposed to mobilize health prevention infrastructures but their administrations had not yet fully implemented the transfer of competences from the last state reform.

At the same time, experts in crisis management pointed to previous virus outbreaks (such as SARS, Ebola or H1NI) which the health system had then contained. They reckoned it would be the same this time, but COVID-19 came with a surprise as the asymptomatic carriers could disseminate the virus without being identified nor traced. The Belgian hospital infrastructure is characterized by a large number of hospitals and hospital beds. Intensive care unit (ICU) beds have an estimated capacity twice that of Italy (Bouckaert and al., 2020). But in terms of hospital staff, the number of patients per nurse and doctor in hospitals is among the highest in Europe (KCE, 2020). Based on these numbers and in the absence of protective resources, the experts recommended the federal authorities to follow a strategy of containment to stop the virus: lockdown would be organized over the whole country and most economic sectors, as no large screening capacity was available at that time.

In the context of the pandemic, hospitals have been identified as critical infrastructure that needs to be protected. The federal experts discussing in the RAG/RMG focused their attention on the capacity of hospitals in intensive care to face the number of cases (and avoid the chaos

observed in Northern Italy). Lockdown measures were justified by the authorities as being intended to limit contamination and avoid deaths, but above all to protect the critical infrastructure that hospitals represent. Our dependence on this infrastructure reveals one of our vulnerabilities (Lakoff, 2017). In March 2020, strict lockdown measures were implemented in Belgium, under the control of the federal authority on the whole territory, notwithstanding its consequences on individuals, families, institutions, companies, especially in view of the many inequalities that a lockdown emphasizes within society (Ozer and al., 2014). Belgium's political structure has led to a particularly complex distribution of responsibilities and competences between different levels in the sector of public health. The federal RMG did not give much attention to the capacities of primary care professionals to handle local spreading of the virus. A blind spot developed in nursing homes for elderly which had no emergency plan specifically adapted to the management of a pandemic: the dangers of contamination among residents were poorly addressed. Emergency planning in these places should have been coordinated by the regional administrations which overlooked this question. The lack of preparation of these communities to deal with such a crisis encountered the unpreparedness of the regional authorities to organize the protection of residents and workers (Fallon and *al.*, 2020) with disastrous consequences. In May 2020, more than half of all Covid-related deaths were recorded in nursing homes.

5. Learning for the future.

In this chaotic period, many examples of efficient bottom-up and voluntary cooperation were observed. It was true particularly for the home production of masks. The heads of ICU from the hospitals taking care of Covid patients decided to coordinate their ICU beds capacity, by autonomously setting up a specific committee to rapidly share information and optimally use spare equipments (Van de Voorde and al., 2020). Another example was the support given to the regional agencies

by the crisis cells of the governors: these operational groups accustomed to manage crisis situations lent support to the regional agencies to organize the distribution of resources to the front-line health professionals and gave technical advice to organize infection control in elderly homes. Several universities created new rapid tests: one of them even took the risk to internally develop a production line to distribute this test in collective settings and nursing homes (www.coronavirus.uliege.be).

The federal administration was allowed to give more support for ensuring adequate resources to the regional agencies. It also developed a coordinated testing and tracing network. While the mobile phone tracking application (Corona Alert) was developed under the aegis of the federal government with a central database coordinated by Sciensano at the federal level, the organization of the telephone follow-up of contacts and the control of quarantine were organized by the regional agencies, which develop their networks according to their own strategies, with the means at hand. This institutional entanglement was very problematic and several pitfalls could have been avoided by a better preparation of the regional authorities to manage epidemic crisis and a stronger coordination with the federal administration.

3. Towards another normality?

The Covid-19 crisis puts the crisis management system in front of a fundamental problem: the pandemic seems to exceed the framework of that system itself. First of all, the system for emergency planning and crisis management was unable to identify the pandemic's alert signals in spite of the information received from China and later Italy, and in spite of the many scholarly papers published early on the topic (Borraz & Bergeron, 2020; Dalglish, 2020; Horton, 2020; Lee & Morling, 2020; Ozer and al., 2020). Then, many governments found themselves improvising their crisis management because the systems were not adequate to handle a large crisis. The conventional planning model is effective to the extent that it focuses on risks for which there is little uncertainty about the nature of their consequences and how they will occur (Clarke, 1999, p. 7). In these situations, emergency planning defines procedures to be followed and the roles of the various actors and intervention groups to best meet the needs determined by the reality on the ground (Fallon and al., 2008). But the current pandemic presented a spreading of hazards and uncertainty largely outside the framework of these scenarios. Emergency planning faces a major obstacle when it comes to dealing with "out-of-the-box" risks such as the Covid-19 pandemic, going far beyond the fields of competence of the institutional actors. New pandemics are caused by pathogens with "known unknowns" such as their characteristics in terms of transmission, reproduction and pathogenicity (Lakoff, 2017).

Some authors observe that Western societies, although highly secure, paradoxically do not cultivate a memory of risk, particularly in the context of pandemics (Keck, 2020). Following the historically unprecedented success of the control of health risks linked to infectious agents, society seems to take for granted a position of invulnerability, whereas chains of interdependence make it particularly vulnerable. In 2020, governments found themselves improvising their crisis management by mobilizing inadequate "fantasy" plans and procedures (to use Lee Clarke's terms in Clarke, 1999) and cultivating a "false sense of preparedness" vis-à-vis the population (Borraz & Bergeron, 2020).

Faced with these new risks, it would be preferable to "get out of the automatic alert channel" by taking a vigilant stance. It is in line with this logic that the WHO set up "pandemic sentinels": in Asia, "virus hunters" and public health officials join forces with veterinarians and bird-watchers to monitor (corona-)virus mutations between wild birds, domestic poultry and humans, as described by anthropologist F. Keck (2020). The objective is to improve reactivity to unforeseen events, by listening to these micro-variations usually buried under representations and routines and then imagining very unlikely scenarios to anticipate them, because "*in the new world of global health, the future is less calculated than scripted, less foreseen than anticipated*" (Keck, 2020, *our translation*).

Implementing such an approach requires a political ambition to engage in crisis planning and management with experts, authorities and those most concerned, namely the citizens themselves. Such an ambition doesn't yet exist in Belgium. Here we find a dual challenge for crisis managers: to deal with the distress of specialists facing uncertainty on complex issues, and to develop a crisis management system capable of integrating the plurality of social situations, and particularly the most exposed groups. A pure top-down approach, characteristic of strict strategic planning, is too rigid to achieve this objective. It would be preferable to replace this rather hierarchical logic, based on a predetermined list of actors, by a reticulated scheme supporting the intervention of numerous and possibly unforeseen experts, and the integration of the population itself into the risk management structures. This highlights the need and the capacity for flexibility of the actors in the field to first develop and then maintain their networks, whether institutionalized or not, through formal and informal relationships. In this sense, "*being vigilant here means knowing how to surround oneself (with people and things)*" (Vallin, 2006, *our translation*). While Belgium's political structure has led to a particularly complex distribution of responsibilities and competences between the levels of power in public health, this institutional complexity could have been overcome through a higher level of coordination and cooperation. The problem is thus the absence of a dynamic of cooperation. The exercise of authority, which is always indispensable in times of crisis, must be transformed in order to be able to animate a tangle of interdependencies, the quality of which lies precisely in the ability to operate together, individually and in groups, in weakly structured environments, in situations of great turbulence.

CRediT authorship contribution statement

Aline Thiry: Conceptualization, Writing – original draft, Writing – review & editing. **Kim Hendrickx:** Writing – review & editing. **Pierre Ozer:** Writing – review & editing. **Sébastien Brunet:** Writing – review & editing. **Catherine Fallon:** Writing - review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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