Behavioural Responses to Pandemic Influenza: Contingency Planning and its Implementation in the UK, by Prof. Joyce Tait and Dr. Ann Bruce

Government contingency planning for a future pandemic has been undertaken at frequent intervals since before 2005. The Innogen Institute was involved in one such initiative in 2008 in the context of the H5N1 'bird flu' event, looking at the likely viability of the UK's pandemic preparedness plans. We looked at the systemic interactions across a broad range of technical and societal drivers that would have an impact on the progression of the pandemic and on state of the UK economy. We particularly noted the mutual incompatibility of the two key government messages – 'social distancing' to avoid infection and 'business as usual' to protect the economy, and predicted most of the economic impacts that are arising today from government reactions internationally to Covid-19.

The full paper can be accessed here.

Social justice should be key

to pandemic planning and response, writes Dr. Agomoni Ganguli-Mitra

At the start of every public health ethics course I teach, I give my students a list of questions to explore, but leave the most important one until last: ‘What kind of society do we want to be?’

I want them to circle back to this thought, no matter the topic, to instil in them the understanding that public health practice and policy are always based on value judgments. Our job, as ethicists, is not always to provide the right answer, but to clarify the values and interests embedded in our decision making.

The Covid-19 crisis illustrates why questions of social justice should be at the core of medical and public health responses. During a crisis, health care professionals are forced to make tragic choices. Should ventilators be prioritised for those with no underlying health conditions to help ensure better survival rates? Or should people in greatest need take precedence? The moral dilemmas facing health workers can be excruciating, but ethicists can help to illuminate the values that inform such decisions.

In our response to the current crisis, we can also provide direction on wider questions of social justice, which go far beyond how we determine medical priorities. Indeed, we face ethical dilemmas at a broader policy level. By adopting, for instance, a model that favours acquiring herd immunity – and opting to sacrifice some lives to save many more – we might fail to weigh up which lives, and vulnerable groups, we would be sacrificing.

Similarly, curbs on individual freedom – so highly prized in liberal societies – can become a focus of ethical tension. We might justify restrictive measures by invoking the collective good, or by showing that a relatively small burden on the general population will protect the most vulnerable. These varying approaches reflect different ethical values and attitudes towards justice, and the solutions are not straightforward.

Pandemics are as much about moral questions as medical ones. Issues of social justice, human vulnerability and structural inequality come into play at home and abroad. Pandemics, as we know, do not respect borders. Our global response should be one of partnership, rather than protectionism, and one based on solidarity and even a minimal sense of global justice.

A fresh approach is needed in our collective ethic. Reports of racism prompted by the pandemic are hugely concerning – a situation that is exacerbated by the protectionist political measures adopted by several countries, fuelling further nationalist sentiments. At an individual level, we see this ethos of looking after our own interests, at the expense of others, reflected in our empty supermarket shelves.

As politicians hasten to address economic concerns, we must stop to consider how our decisions are exacerbating inequalities associated with race, age, class, gender and disability. Are we only hearing the voices of the powerful, and silencing those of the most disadvantaged? It is a question we need to grapple with, individually and collectively.

There is growing evidence that the long-lasting effects of the pandemic will deepen structural and social inequalities. The imposition of strict social distancing will see many women and children forced to remain with their abusers while, in even the most privileged circumstances, women will bear the brunt of care work and provision of emotional support.

Similarly, people with disabilities not only face greater health risks, but will also suffer most from a lack of support services. In our rush to save lives, there is a growing risk that people with disabilities are seen as expendable. Among the worst affected will be those who have little or no claim on our governments; think of migrants stranded on the margins of society. There is no possibility of self-isolation in a refugee camp, or when you have a forced mass migration.

In the coming months, as our health systems focus on how to save lives – and, eventually, rebuild – an ethic based on social justice might prompt us to consider those socio-economically vulnerable members of society who have helped to prop up our economy and political structures during this crisis. Indeed, although we speak of a crisis, a pandemic of this nature has severe long-term repercussions. Will those of us who enjoy much privilege be willing to endure further sacrifice so that those who have lost the most in this pandemic are able to recuperate?

When I teach my class this autumn, the pandemic will loom large in my thinking. As I sit just now in my makeshift home-study and imagine training the next intake of doctors, lawyers and policy makers, I am increasingly convinced that ethics and justice should underpin all of public and global health. My key question to my new students will be: What kind of society do you want to build in the decades ahead? It may just make its way to the top of my list.

This post was first published on the Justice in Global Health Emergencies & Humanitarian Crises website, A Wellcome Trust project

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We urgently need to understand the medication histories of COVID-19 victims, writes Dr. Stefan Ecks

On March 18, 2020, Dr. Anthony Fauci and Dr. Howard Bauchner discussed a possible link between common hypertension medications and a heightened risk of dying with a coronavirus infection. Dr. Fauci directs the National Institute of Allergy and Infectious Diseases and is a key advisor on the White House Coronavirus Task Force. Dr. Bauchner is the Editor of *JAMA*, the *Journal of the American Medical Association*. Not exactly lightweights, as Walter Sobchak would say. Fauci and Bauchner responded to reports of a link between ACE (angiotensin converting enzyme) inhibitors and COVID-19 fatalities. Fauci said that ACE inhibitors can increase “the expression of the receptors for the virus” (JN Learning 2020). Fauci was struck by reports from Italy that the vast majority of those who died with COVID-19 suffered from hypertension. Italy is a rich country with excellent access to care, so chances are that most of the patients had been taking ACE inhibitors to treat their hypertension. “Why should someone who has hypertension that’s well controlled have a much greater chance of dying than somebody else with any other kind of underlying condition?,” Fauci asked. “We really need to get data and we need to get data fast” (JN Learning 2020).

As the SARS-CoV-19 pandemic is unfolding, strong links between the infection and “underlying health conditions” have become evident. Studies of mortality rates in China show that almost all the people who died with the virus had pre-existing disorders (Novel Coronavirus Response Team 2020). COVID-19 is an acute infection with mild to moderate flu symptoms in most people. But in combination with noncommunicable disorders such as heart disease, diabetes, chronic respiratory disease, high blood pressure, and cancer, the infection can be fatal. Multimorbidity is the first key to understanding COVID-19 mortality rates. What is not yet known is if COVID-19 victims also have similar patterns of medication use. Multimorbid patients tend to be on several chronic medications simultaneously. It is likely that some of these medications put people at a heightened risk of dying from the infection. The data that we urgently need, but completely lack, are the medication histories of COVID-19 victims. Medication profiles could prove to be the second key to understanding COVID-19 mortality patterns.

Multimorbidity occurs when the same person suffers from two or more chronic disorders. The disorders can be noncommunicable, infectious, or mental. Noncommunicable diseases are cancer and heart disease; mental disorders are depression and dementia; long-term infectious diseases are HIV and tuberculosis (Academy of Medical Sciences 2018: 6). There is no agreed definition: some classify multimorbidity by the number of disorders that occur together, others look for recurrent clusters (Busjia 2019). What comes into the clusters varies, some consider only a handful of chronic disorders (Dugravot et al. 2020), while others capture dozens of conditions (Payne 2020).

Multimorbidity is increasing across the world. In rich countries, multimorbidity makes up 25-50% of the overall disease burden (Garin et al. 2016; van der Aa et al. 2017). Longer lifespans mean more multimorbidity: the older people get, the more chronic health problems they have. Up to two thirds of people over 65 are multimorbid. Treating older patients accounts for a large chunk of all health expenditures (Kaufman 2015). The pharmaceutical industry promotes the chronic consumption of five or more medications as necessary for the maintenance of “normal” health (Dumit 2012).

Multimorbidity is not a new condition, there have always been people with more than two health issues at the same time. Yet the medical focus on multimorbidity is new. According to Dr. Chris Whitty, the UK government’s chief advisor on COVID-19, multimorbidity did not come into view for so long because biomedicine is organized “vertically” on specific diseases, while a “horizontal” understanding of simultaneous disorders is lacking (Whitty et al. 2020: 1). Biomedicine is founded on specific aetiology and specific treatment. The “medical model” tries to capture the specific causes of disorders and to develop therapies that target unique pathogens or other similarly specific causes (White 2006: 141-142). It is almost impossible for individual clinicians to control for all possible side effects of multiple medications taken over a long period of time. In an era of rising multimorbidity, biomedical specificity has serious limitations.

Iatrogenesis takes three forms: (1) polypharmacy, when too many different treatments are given at the same time; (2) drug-drug interactions, which happen when two or more drugs together produce adverse side effects; and (3) inappropriate treatments that harm instead of heal (Novaes et al. 2017). Different forms of iatrogenesis can happen together and augment harmful effects. Patients with multiple chronic disorders are at a particularly high risk of iatrogenesis because they are consuming different medications simultaneously and for a long time. Multimorbidity exacerbates the risks of iatrogenesis. For example, beta-blockers prescribed for heart disease or high blood pressure can worsen asthma and mask dangerously low blood sugar levels in diabetics (Onder 2013). Public health researchers are speaking of the first iatrogenic epidemic in history (Mangin & Garfinkel 2019). “Polyiatrogenesis” is the deepening of multimorbidity through isolated vertical interventions. In an era of rising multimorbidity, the adverse effects of taking different medications for different chronic conditions are increasing.

Medical researchers have done excellent work in teasing out the various chronic conditions of people who died with the coronavirus infection, but a deeper examination is needed. In the next step, we need to go beyond specific conditions and look for nonrandom clusters among the patients’ chronic conditions. In a further step, medication histories of COVID-19 victims should be recorded and analysed. There are a myriad of possible interactions between SARS-CoV-19, existing comorbidities, and medication histories. The possible link between taking ACE inhibitors and an increased risk of dying with a SARS-CoV-19 infection might just the tip of the polyiatrogenic iceberg. There are potentially dozens more such interactions. We need to know what drugs people take and if there are nonrandom clusters of medication use and fatal COVID-19 trajectories.

Tracking medication histories of multimorbid patients will also help to model population-based mortality rates with greater accuracy. By early April 2020, the impact of SARS-CoV-19 is far more severe in rich countries than in low-income countries. The United States now have the highest number of confirmed infections and are on course to overtake Italy and Spain in the number of fatalities. This pattern is surprising, because infectious diseases usually strike much harder in low-income countries. One reason why Europe and North America are the current epicenters of the COVID-19 pandemic could be that patients have longer life expectancies and, therefore, higher rates of multimorbidity. But it is also possible that COVID-19 strikes harder in multimorbid patients with a long and complex medication history. The world map of COVID-19 victims does not show a Global North/South distribution of wealth gaps or lack of healthcare. Instead, the COVID-19 map looks like an atlas of industrialized countries with a deep presence of biomedicine. Monitoring victims not just for underlying health conditions but also for their medication histories is the only way of knowing if COVID-19 mortalities might be linked to medication use patterns. Finding clustered relations between COVID-19, underlying conditions, and medication use will save thousands of lives.

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Lessons for self-isolation from chronically ill patients, writes Ritti Soncco

Since the first cases of Covid-19 were confirmed in the UK, the freedoms of movement, socialisation and conviviality that many of us take for granted have been radically reduced. But for patients who are chronically ill, the social patterns currently dictated by the government are very familiar. My social anthropology research involves fieldwork with Lyme disease patients in Scotland whose lifestyles are dictated by their immune systems. Where they go, how long they leave home, and who they meet, are all carefully managed in accordance with their immune systems. So when coronavirus hit the United

Kingdom, I expected the pandemic to dominate conversations in the Lyme disease circles as much as it did in my other circles. Coronavirus is after all touching all corners of the world. But to my surprise the one place coronavirus did not dominate was in the world of Lyme disease.

The online forums continued at their normal pace: exchanging the latest medical research, supportive stories of everyday victories, reaching out for comfort. Discussions of coronavirus trickled in over the weeks but most of the time my participants had other things on their mind. This was not the sheer panic I was seeing in the mainstream media. I asked Pauline, one of my participants, who told me: “It will work itself out. Life goes on.” No matter which angle I tested, Pauline resisted falling into the patterns of panic I was seeing everywhere else. I was ready to categorise her lightheartedness as a poised British coping mechanism when she said: “People were having a panic and I was saying, ‘There’s nothing you can do about it’ because I think the stress makes them worse.”

Her words boomed with familiarity. The stress, anxiety, and fear all around us are familiar emotions to Pauline who, like so many other Lyme disease patients, had spent years managing their impact on her mental health. In this time of radical uncertainty, the ones with a map are those experienced with dealing with the mental health impacts of risk: chronically ill patients. Speaking to other research participants seems to confirm this. Lyme disease patient and advocate Alice stated frankly: “I don’t feel too much out of depth. I’ve been terrified for 13 years and I’m not getting any more terrified.” The author of *Finding Joy,* a novel based on her 10 year experience living with Lyme disease in Inverness, Morven-May MacCallum said, “When you have Lyme disease, you live with death for so long, it becomes normal”.

As coronavirus sweeps across the planet, it is also inverting the world from a place of health to a place of illness. What may be strange and frightening ‘states of pandemic’ to many are, to those who living with chronic illnesses, continued ‘states of normality’. To them, this new world ruled by stockpiling, isolation and social distancing is comfortable territory: “This is what’s known to us. This is what we’re good at. We know to buy our medication in advance. We know how to avoid germs, avoid people,” Morven-May said. “Everybody is entering our world, whereas before we were trying to enter your world.”

To those of us entering this new world, some comfort may be found in knowing it is already inhabited and in listening to its inhabitants. My participants’ journey will now sound all-too familiar: mourning the end of a way of life; changing from being active members of communities to being house-bound; confining big lives into small spaces. Difficult as it may be, we have the important opportunity to make visible the chronic patients who have experience and listen.

Given the multitude of platforms available for contact (Skype, Facetime, WhatsApp, Snapchat), Alice suggests the term ‘social distancing’ is inaccurate. “Socially we might come closer in many ways,” she says. The term may even be problematic as it can generate unnecessary fear of isolation. “Make every attempt to try and maintain social interaction even if you’re physically isolated,” Alice recommends.

Both Morven-May and Alice recall the pressures isolation had on their mental health. “For each person, self-isolation will bring out different things,” Morven-May admits. “Some people will become claustrophobic, irritable, apathetic, retract into themselves, they won’t want human company at all.” Alice warns of the loss of self-esteem when the sources for it are gone: “If you’ve lost your ability to work, the esteem that comes from that might dissipate. People will start to question themselves so they should try and do something to avoid this.” To this, Morven-May recommends finding laughter to dissipate the anxiety and honouring the simple comforts. She recalls:

“One thing that made a difference to me when I was really unwell is get a chair and sit it by the window, open the window and just breathe in fresh air. People need to look for those little luxuries.”

As we navigate the lockdown and adapt to this changed world, new and important conversations become possible, perhaps with a lasting effect: “Maybe it’s a moment for people to have empathy with those who are trapped inside their homes more permanently,” Morven-May hopes.

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With gratitude to the participants of my PhD research: Alice, Morven-May and Pauline.

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The social value of testing has been ignored by public

health responses to the Covid-19 outbreak, writes Dr Alice Street.

We now know that testing is essential to our ability to limit the scale and impact of the Covid-19 outbreak. No government that seeks to minimise loss of life can ignore the importance of diagnosis.

The UK Government's announcement that they will scale up testing to 25,000 tests a day is a rapid U-turn on their previous position that testing of mild cases was not necessary as we moved from 'containment' to 'delay'.

The policy change followed a flood of criticism from the global public health community, including renowned epidemiologists and the Director-General of the World Health Organisation (WHO). The reversal also feeds suspicions that the decision to reduce testing was driven less by science than by resource limitations and a lack of laboratory preparedness.

Why is testing so important? The conversation so far has focused on the public health benefits of diagnosis. These include containment. Testing of suspected cases informs doctors and authorities who should be isolated, whose contacts need tracing, and when it is safe to release patients back into the community. Its main purpose it to break chains of transmission in the community.

But containment only works if all suspected cases are tested and the scale of the Covid-19 outbreak is pushing our existing laboratory infrastructure to the limit.

Large-scale diagnostic data-sets help epidemiologists know where and how fast the virus is spreading, enable forecast modelling and assist authorities with the distribution of limited resources.

The Government’s current surveillance system involves testing a random sample of patients from different geographic areas. But experts have argued that this approach is flawed and comprehensive surveillance involving real-time data collection of all individual cases is essential for a fully informed, targeted and effective response.

Covid-19 is a novel pathogen with no established scientific evidence base. Testing is an essential research tool in the race to understand the virus and answer fundamental questions like:

How did animal-human transmission occur?

Why is Covid-19 more contagious than previous coronavirus strains?

What is its case fatality rate?

How has the virus mutated over the course of the outbreak?

Infected, but no symptoms

The race to develop an accurate point-of-care antibody test that can detect who has been exposed to the disease will help scientists understand the numbers of infected people who do not experience symptoms.

Public debate about Covid-19 testing has so far been dominated by epidemiology and public health. This is at the expense of discussion on the social value of testing.

We have been told that testing will do little to change individual clinical outcomes. But in the US people are queuing for over three hours at drive-thru testing centres.

In the UK, private firms are selling thousands of unapproved testing kits to the public at £295 each. People understandably want to protect their loved ones. NHS staff are demanding testing so they can protect patients while they work and continue to work if they are not infected.

But what else is driving the public demand for testing? Medical anthropologists have long observed that people desire a diagnosis for multiple reasons, and that these are not always about medical care.

A diagnostic label gives people a sense that their suffering has been recognised as valid, gives reassurance that they are being looked after, provides the basis for legal rights in some circumstances, and can be the basis for new social identities and solidarities.

In a context of deep uncertainty and public anxiety, access to diagnostic testing gives people a wider sense of control and the confidence that authorities have the situation in hand.

Public trust at a time of crisis

Diagnosis also gives patients the confidence to follow through on the advice they are given. Expecting whole households to self-isolate for 14 days without a diagnostic test is a big ask. In cases where symptoms are mild, doubts are bound to creep in. Uncertainty depletes resolve.

The challenge the Government faces is that, even when it is available, diagnostic testing rarely meets people’s expectations for certainty. We have seen this most starkly in the scandal over test quality in the US, but even the best available tests have limitations to their accuracy.

Research by my team on the social role of diagnostic tests in under-resourced health systems has shown that when testing is not properly supported by wider systems, it can increase uncertainty and deplete trust in health care.

In some places, people link failure of diagnosis to state failure, with potentially profound implications for people’s trust in government at a time of crisis.

The Government needs to invest immediately and heavily in laboratory systems. This means investing in the development of new diagnostic tools but just as important are investments in the people, laboratory infrastructure, transportation systems and waste management systems that deploying those tests will depend on. They need to start viewing testing infrastructure as a source of public reassurance and not just a public health tool.

The tsunami of criticism from public health experts has now pushed testing to the top of the Government agenda. But it is also important to understand why demand for testing among the UK public is so high.

As public discourse descends into panic, the Government continues to ignore the social value of diagnostic testing to its peril.

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The COVID-19 pandemic: are law and human rights also prey to the virus? Asks Prof. Graeme Laurie

COVID-19 was declared a global pandemic by the World Health Organization (WHO) on 11 March 2020. In the United Kingdom, after extensive criticism across different sectors of society regarding government inaction and ineffective policies – as well as piecemeal communication about possible measures relating to citizens over age 70 to maintain social distancing for a period of months – HM Government announced on 15 March that daily press conferences will be held "…to keep the public informed on how to protect themselves". As for first responders and other professionals who find themselves at the front line of the battle to delay the spread of the virus, guidance is available, but its accessibility and absence of detail is worrying, as a cursory look at the official website will reveal. Importantly for this blog, the Department of Health and Social Care's Coronavirus Action Plan makes no mention whatsoever of the legal position underpinning any of its initiatives. So, in this blog I ask:

Are law and human rights also prey to the impact of the COVID-19 virus?

In attempting to answer this question, I make the case for constant vigilance with respect to the role of the law and human rights in a public health emergency, as well as giving a brief account of the complex legal provisions that can be deployed as public health measures. I offer a checklist of considerations for delivering legal preparedness in emergency contexts, including the value of civil liberties impact assessments that can help to monitor compliance with law and human rights throughout these difficult times.

On the importance of law in a public health emergency

Law is a social tool of considerable importance. This is never truer than in the middle of a global health crisis when the situation changes rapidly and dramatically on an hourly basis. Law and legal institutions become crucial in maintaining the delicate balance between order and chaos, between public and private interests, and between promotion of the common good and protection of civil liberties. Global health emergencies require rapid, complex, multi-agency and multiple agent actions, as well as multi-layered-readiness at four stages, being: (1) preparation, (2) response (3) protection and (4) recovery. Lack of clarity about the role of law, or continued uncertainty about legal rights and responsibilities, can seriously hinder or impede effective responses. It is now clear that we are deep in the third phase (protection) of the COVID-19 pandemic, and any national and international governmental failures to prepare in advance for this latest pandemic will rapidly become apparent. This makes it all the more crucial that attention is paid to *legal* preparedness to respond responsibly to an rapidly-changing – and undoubtedly in the short-term – worsening situation, as plans and contingencies fail.

At the time of the N1H1 flu pandemic, just over a decade ago, a speaker at a US summit on preparedness made the following astute comment:

> …when it comes to pandemics, any community that fails to prepare – expecting that federal government can or will offer a lifeline – will be tragically wrong. Leadership must come from governors, mayors, county commissioners, pastors, school principals, corporate planners, the entire medical community, individuals and families [1].

This suggests that there is a risk in over-centralisation of response mechanisms to global health emergencies. The threats are manifold, potentially affecting communication, coordination and contingency planning. From a legal perspective, it highlights that first responders and others, such as healthcare professionals, hospital and school administrators, and local officials must be properly supported and folded into rapid decision-making when responsibilities for hands-on management of the crisis falls to them. As a minimum, there must be clarity of legal responsibilities and obligations, including domestic laws and international human rights.

What is the legal position on public health emergencies?

The legal position on responding to a public health emergency of international concern (PHEIC), as it is officially termed in legal parlance, begins with the International Health Regulations (IHRs, 2005). These establish ‘an agreed framework of commitments and responsibilities for States and for WHO to invest in limiting the international spread of epidemics and other public health emergencies while minimizing disruption to travel, trade and economies’. However, while acknowledging that the WHO and the IHRs may play an important role in surveillance and reporting of pandemics, and in providing a framework for tackling them, effective action must begin and end at the state level, as it remains the sole entity – in principle – with the sanctioned power to enact policies that can lawfully curtail civil liberties. This is also because of an obvious and serious limitation within the international regime: the absence of sanction mechanisms within the international framework to require compliance by countries. And, while WHO can assist a country in its surveillance and response if requested (Article 44), the real problem of dealing with an aberrant state remains.

Domestically in the UK, the legal position is piecemeal (to say the least). While the Coronavirus Action Plan acknowledges the importance of all four nations’ administrations to work together, the legal basis for this is fragmented. For example, in England and Wales, the bulk of legal authority is found in the Health and Social Care Act 2008, amending the Public Health (Control of Disease) Act 1984. The 2008 Act amendments are largely concerned with responses once a threat has already presented itself; it less concerned with contingency planning to coordinate responses prior to any such threat. While there are provisions for monitoring and notifying outbreaks, there is far less consideration for joined-up working beyond the very local response. Sections 45B and 45C of the 2008 Act confer powers on the Secretary of State to make provision by Regulations with respect to health protection measures for international travel and domestic affairs respectively. Provisions can be made both with respect to requiring action from professionals and authorities in the face of a public health threat and with respect to members of the public, their behaviour and their rights. As to the effect on members of the English and Welsh public, Regulations can impose restrictions or requirements in relation to persons, things or premises in the event of or in response to a threat to public health (s.45C(3)(c)). In particular, this can include a requirement that a child be kept away from school, and a prohibition or restriction on the holding of an event or gathering (s.45C(4)). Regulations can also include provision for imposing ‘a special restriction or requirement’ as set out in Sections 45G(2)(e)-(k), 45H(2), and 45I(2). These include, among other things, that a person be disinfected or decontaminated; that a person wear protective clothing; that a person’s health be monitored and the results reported; that a ‘thing’ be seized or retained, or be kept in isolation or quarantine; or that a premises be closed, decontaminated, or destroyed. Pursuant to section 45D(3), however, and unlike the powers in relation to international travel, domestic Regulations may not require that a person (i) submit to a medical examination; (ii) be removed to a hospital or other suitable establishment; (iii) be detained in a hospital or other suitable establishment, or (iv) be kept in isolation or quarantine. Such measures may be imposed only by an Order from a Justice of the Peace on application from a Local Authority.

Similar provisions exist in Northern Ireland and Scotland, but underpinning all of this at the UK national level is the Civil Contingencies Act 2004. The Civil Contingencies Act 2004 (CCA) is a measure of last resort when it comes to the creation of ‘emergency powers’, leaving existing legislation to govern responses across an incredibly wide range of areas and actors. The ability of this legislation to empower all relevant actors to respond adequately is questionable. The CCA itself lays down a broad framework for preparedness, but it is far from clear how, or indeed when, this would operate when we move from the stage of preparation to action, and whether the complex lines of communication and coordination that are essential to an effective response to a public health emergency are in place. Nor is it clear whether relevant actors are sufficiently apprised of the measures and the legal parameters within which they will be expected to act when an emergency such as COVID-19 is upon us.

The legal position, albeit complex can be summed up as follows: legislation such as the 2008 Act (and equivalent measures in Scotland and Northern Ireland) should be used in the first instance, while escalation of a crisis to an ‘emergency’ – defined to include “(a) an event or situation which threatens serious damage to human welfare in a place in the United Kingdom” – triggers the centralised provisions of the CCA 2004. But how are officials, professionals and the public to navigate such complexities and to know what is being done legally or when the balance has been tipped too far away from the adequate protection of civil liberties in favour of a putative threat to public health?

Legal preparedness in the face of public health emergencies

In an attempt to begin to answer this question, I offer further core questions that should be at the heart of all plans and planning exercises for global or public health emergencies. These are:

1. Are all public health officials and other actors with responsibilities fully apprised of the relevant legal provisions, their duties and the limits of their roles?
2. What is the level of informational joined-up-ness between sectors, jurisdictions, disciplines and professionals? That is, are lines of communication and balance of responsibilities clear within the complex web of potential actors?
3. iii. Do existing laws impede preparedness, either through unnecessary provisions or lack of clarity or inflexibility?
4. Are we aware of gaps in existing legal provision and are we clear on how these gaps will be filled (in particular how the CCA will be deployed)?
5. Are we naive in our premises, for example, that voluntary compliance with self-isolation or quarantine will prevail? If so, are we clear enough on what will happen next?
6. Do we have adequate mechanisms to test legal preparedness and to benchmark best practices?
7. vii. Do we have adequate mechanisms to test the competencies of relevant actors with respect to legal preparedness?
8. viii. What are provisions for effective communication and coordination of legal materials and information about legal responsibilities?
9. What provisions exist for decision-making when information is ‘less than complete’?
10. What is the role of social distancing and who has authority to require or restrict it?
11. What is the role, if any, of the military?

Wither human rights?

For so long as the UK remains a member of the Council of Europe and signatory to the European Convention on Human

Rights, all legal preparedness must also be about ensuring that any measures taken that impact on civil liberties and human rights are necessary and proportionate to the social objective sought. The Civil Contingencies Act 2004 cannot amend the Human Rights Act 1998 (c.42), and any emergency regulations made under the Act are treated as subordinate legislation for the purposes of the 1998 Act.

Pursuant to Section 22 of the 2004 Act (Part 2), emergency regulations may provide for:

- The confiscation of property (with or without compensation);
- The destruction of property, animal life or plant life (with or without compensation);
- The prohibition or requirement of movement to or from a specific place;
- The prohibition of assemblies (of specific kinds, at specific places or at specific times);
- The prohibition of travel.

Most obviously, these provisions could raise the following human rights/civil liberties issues:

- privacy; (Article 8 of the European Convention on Human Rights)
- property; (First Protocol to the Convention);
- mobility/liberty; (Article 5 of the Convention); and
- freedom of association; (Article 11 of the Convention).

There are a number of points to note about the nature and operation of human rights laws as they relate to global/public health emergencies. It is trite that while human rights are fundamental rights, in most instances they are not absolute. That is, while human rights instruments identify protections that are considered to be of core value to our society, these do not deserve protection at any cost. Exceptions are possible. The starting point is, however, that fundamental rights should be protected and the onus is on those who would interfere with such rights to justify any interference. Thus, Article 5 (protection of liberty) allows for detention of persons ‘for the prevention of the spreading of infectious diseases’, while Articles 8 and 11 (privacy and association respectively) permit interferences ‘…for the protection of health…or the rights and freedoms of others’. By the same token, interference with some rights is more readily justified than in other cases. For example, Article 5 only permits exceptions from a restricted and limited list, while Articles 8 and 11 permit a range of exceptions which are subject to the watchwords of necessity and proportionality. In such cases, interferences with human rights are only justifiable when they are in accordance with the law, necessary to address a pressing social need, and employ proportionate means towards specified ends. This can only be judged on a case-by-case basis, but permits a degree of latitude in determining what is necessary and proportionate, albeit with the proviso that interferences should be minimal to achieve the social objectives. The practical consequence of Article 5 is, however, that a potentially higher level of protection is accorded, in that it is more difficult to depart from its provisions. This gives effect to a form of hierarchy of rights, such that the ease with which interferences can be justified ranges from most difficult (Article 5) through moderate (Articles 8 and 11) to more easily justified (Article 1; Protocol 1 on property).

Thus, central to the protection phase of legal preparedness is the need for the courts to be maintained, or at least for judicial oversight to be made possible at all times. There is a lack of clarity in the possible meanings of the threshold terms used in law, such as ‘necessary’, ‘proportionate’ and ‘public interest’. Notwithstanding, there is a wealth of case law and literature which has attempted to flesh-out meaning over time and on which to draw.

Moreover, from the perspective of the ethical content of the value-based decisions, we can consider the intervention ladder developed by the Nuffield Council on Bioethics which offers a way of thinking about possible government action and appreciating the associated consequences for civil liberties. This ranges across options from ‘doing nothing’ and monitoring a situation, through measures oriented towards ‘enabling choice’, ‘guiding choice’, ‘restricting choice’ and, ultimately to ‘eliminating choice’. As the intervention becomes more intrusive, so the need for justification becomes more compelling. While acknowledging that there is an ethics element built into UK planning, governments and other responsible parties would do well to consider a **Civil Liberties Impact Assessment** to accompany all contingency plans with particularly close attention paid the points at which escalation of action will take place. Such an impact assessment might be modelled, for example, on existing privacy/data protection impact assessments which have operated in many countries world-wide for many years and that in some instances are now required under the EU’s General Data Protection Regulation (GDPR). A Civil Liberties Impact Assessment is also akin to human rights impact assessments, save that its scope will be wider than only looking at rights – our civil liberties encompass both rights and civic freedoms and protect us from state action even when any given human rights instrument might not apply. This is particularly important to bear in mind in the current UK post-Brexit era where there is open hostility in many quarters towards the European Convention on Human Rights.

Legal Preparedness for Pandemic: a 10-point Plan

Drawing on all of the above, I suggest that there are 10 key areas where the UK could pay close attention to improving legal preparedness for dealing with the current COVID-19 pandemic (and all future global/public health emergencies).

1. Assessing and meeting the (legal) training needs of all

relevant actors, and not merely responders identified in legislation;

2. Drafting legal instruments to govern practices in emergencies and testing legal validity beforehand;
3. Establishing an open access central repository of legal instruments and measures;
4. Identify more clearly tolerances for escalation of efforts and carrying out civil liberties impact assessments on all stages of contingency planning;
5. Assessing and providing support for courts and associated personnel as crucial mechanism for dispute resolution and protection of civil liberties during outbreaks;
6. Articulating and exploring the legal situation in the event of full escalation, and in particular, considering worst case scenario planning and the arrangements for policing such scenarios;
7. Establishing and clarifying legal authority for deployment of military, limits and controls, if contemplated;
8. Learning (legal) lessons from other public health emergencies, for example, SARS in Canada & Asia, Anthrax in Scotland, or even emergencies in other government departments such as the experiences of the Department for Environment, Food and Rural Affairs with foot-and-mouth disease.

10. Clarifying and assessing balance of powers and competencies across jurisdictions;
11. Conducting further research on evaluating legal preparedness, for example, how best to protect civil liberties as threats increase and/or plans fail.

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[1] Special Supplement, The National Action Agenda for Public Health Legal Preparedness, (2008) 36:1 Journal of Law, Medicine and Ethics at 11.

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