

1 ROYAL HOSPITAL SCHOOL LECTURE:

PREDICTING THE PANDEMIC: THE MAN WHO SAW IT COMING

My name is Robert (Bob) Clark, and I was at the Royal Hospital School in Raleigh, leaving in 1968. I would like to say a big thank you to the School for inviting me to kick-off its inaugural online lecture programme on February 10th, 2021. The subject was very topical and focused on the Coronavirus pandemic which of course has been dominating the world's media channels for much of the last twelve months. In case you missed the live session, you can watch the recording via this link: [RHS Pandemic Webinar 2021-02-10](#). Look for the instruction "Watch Lecture Here" towards the bottom of the page.

I used my most recent book "[Business Continuity and the Pandemic Threat – Learning from Covid-19 while preparing for the next pandemic](#)" as the basis of my talk while sharing much of the research that I have undertaken while writing it.

Whenever I have presented at a seminar or a webinar, I always find it very satisfying when there are a lot of questions. It is as if the audience is saying "we want to know more". Well, the audience on that February evening certainly did not disappoint and between them they asked a number of both interesting and very searching questions. Regrettably, there was only enough time to answer just a few of them although, through this blog, I am endeavouring to respond to those questions that we did not get round to.

I found the questions primarily broke down into six categories which, in no particular order, included:

- The strategies adopted in dealing with the pandemic
- The economic implications
- The debate around hands-face-and-space
- The pros and cons of lockdown
- Vaccinations
- Post pandemic outlook

Some of the questions were similar and for these I have provided combined answers. There were also two or three questions that sought my opinion across a broad range of issues which I have endeavoured to cover too.

1.1 The Economy

1.1.1 Which business sectors will bounce back, and which do you think will fail?

This is a very good question which I cover extensively in my book although here is a brief précis.

There are some industry sectors that have thrived during the pandemic especially those retail businesses with an online presence. Conversely, those non-essential high street outlets without an online offering, the Arcadia group is a point in case, will be very lucky to survive in their original form, if at all. Supermarkets' delivery and click-and-collect services have seen massive growth in demand as have online conferencing platforms like Zoom and Teams not to mention the online video gaming industry. Will they be able to

maintain this growth post pandemic or even hang on to those new customers? Only time will tell.

The hospitality industry has suffered terribly, and I fear that many establishments will not be reopening their doors to welcome us back. We may even see the demise of some of the small independent brewers and distilleries whose downstream supply chains disappeared during lockdown. Those restaurants that have been able to offer a take-away option are probably better positioned to survive than those that could not. Moreover, delivery services such as UberEats and Deliveroo have certainly facilitated our change in eating habits. Personally, while I don't object to the occasional take-away, I do like eating out from time to time and will be only too happy to patronise my favourite restaurants once again, if they are still there.

Like the hospitality sector, travel and tourism has also suffered badly. In the UK, we lost Flybe right at the start of the pandemic. Admittedly it was already in trouble, but the arrival of the coronavirus was the proverbial last straw. Other airlines have scaled back their staff numbers affecting both flight and cabin crew as well as ground crew. How quickly can they recruit if they need to? Moreover, if there is a sudden demand for overseas holidays, we may see prices rise with demand. Since Boris Johnson revealed the plan to exit lockdown on Monday 22 February, travel companies have reported a massive surge in bookings. So, the travel and tourism will recover although like bars and restaurants, some travel companies and hotels along with their supporting businesses will not have survived. But will we require Covid-19 vaccination passports to travel overseas? There is even talk about some entertainment venues only allowing entry to people who have been vaccinated.

1.1.2 How and what will have to change to be able to afford a second pandemic.

And how do you think government spending will cope with the strain?

To date, the final cost of the pandemic is estimated to cost the UK economy in excess of £350 billion, causing the biggest UK economy shrinkage on record. As former Chancellor of the Exchequer, Philip Hammond, said "that is the equivalent of fighting a war". He also added that the Government will have to make some unpopular decisions regarding the economy. Will we be heading into a period of higher taxation or austerity, maybe current Chancellor Rishi Sunak will provide some clues in his next budget due on March 3, 2021.

In January 2021, the Financial Times predicted that the UK would be one of the last major economies to recover from the pandemic. It projected the recovery to pre-pandemic GDP level would not be achieved until the second half of 2022. Moreover, not only do we have the burden of the massive cost of the pandemic, but we also have the after-effects of BREXIT to contend with too.

So, how will we manage to pay for another pandemic of a similar, or even worse, magnitude? To make sure we are better prepared for the next pandemic, initially, via an independent enquiry, we must learn from not only the experiences that the UK has been through, but other countries too:

- what went well,
- what could have been done better
- what was a complete disaster

- what worked well for another country that could also work for the UK (remember that one size does not necessarily fit all in this business)

That needs to cover all aspects of the pandemic including health services, education, essential and non-essential industries, the good, bad and ugly of lockdowns, the pros and cons of closing borders, testing and tracing, public behaviour, communication strategies including social media's part (both the positive and negative) etc. The UK has had an influenza pandemic plan in place since 2011 (see [UK Pandemic Plan](#)). This was used to test the NHS's ability to respond to an influenza pandemic back in 2016 in what was known as 'Operation Cygnus' and lessons were clearly learned. That said, "Operation Cygnus" did not look beyond the Health Services ability to respond. However, we now have the opportunity to learn so many more lessons from Covid-19, lessons that should enable us to reduce if not avoid future knee-jerk reactions and potentially reduce the cost of managing another pandemic.

So, what about the cost to date? To begin with, the UK will be repaying all the borrowed billions for decades to come although over time the debt will drop in relative terms against the GDP. We should also keep in mind that the UK only finished paying for World War Two in 2006 and the debt from World War One was finally discharged nine years later in 2015. Should we find ourselves facing another 'expensive' pandemic sooner rather than later, we should take some comfort in the fact that the UK was borrowing money to pay for World War II long before it had repaid the debt from World War I.

1.2 Hands-Face-Space

1.2.1 Will mask wearing become the 'norm' globally?

I have been to Hong Kong on a number of occasions. On my first visit, I noticed a few people were wearing facemasks and I concluded that perhaps they were trying to avoid catching some bug that was doing the rounds or maybe they were concerned about air pollution. I was wrong on both counts. These individuals already had some infection such as a cold or influenza, and they were trying to avoid spreading it to their fellow citizens. Very public spirited and not something you expect to find in the western democracies. I have since learnt that this is common practice in other countries too such as China, South Korea, and Taiwan. Apart from being Asian, they all have one other thing in common, they have all previously had first-hand experience of potentially fatal coronaviruses (e.g., SARS and MERS etc.). They know all too well the collective benefit gained from wearing facemasks. Perhaps we should take a leaf out of their book.

1.2.2 Do you think sportsmen (e.g. Rugby and football players) should stop hugging and kissing during and after the game? It seems a recipe for cross infection.

Much as I love to watch live sport, and I appreciate the enthusiasm shown when, for example, a goal is scored, I could not agree more with the sentiment of the question. So, given that the pandemic still out there, loitering with intent, I do believe that acts of hugging and kissing should be discouraged.

But what about the various greetings that other cultures practice out there in the world? Are the French still shaking hands and kissing cheeks? Are the Maoris in New Zealand still

rubbing noses? Are the Japanese bowing while now observing social distancing? So, I would suggest that it does go beyond just the emotional celebrations that we witness in sport.

1.2.3 You mentioned the transfer of the virus via touch but very few people wear gloves. What are your thoughts?

We human beings are hard wired to touch our faces. We do it without even thinking about it and a couple of studies I have seen suggest that on average we do it around 20 times an hour. So, if we touch our faces, we can transfer any virus that has contaminated either hands or gloves. This makes it easier for the virus to enter our bodies via our mouths, nose or eyes. This is the primary reason behind why we are encouraged to regularly wash our hands and use sanitising gels to reduce the risk of a hand-to-face virus transfer occurring. Remember that while we are less likely to wash our hands while wearing gloves, we might still inadvertently touch our faces with gloves that might have been contaminated.

1.2.4 In terms of seeing an end or loosening of social distance practicing, how long do you think this will take in the UK and how will it come about?

Between the webinar and me completing this response to the questions raised, the Prime Minister has revealed the four-step plan for exiting the current lockdown which can be found by clicking [here](#). But as I read it, the various dates quoted are aspirational and will very much depend upon data which will be based upon four tests being successfully met:

- a. The vaccine deployment programme continues successfully
- b. Evidence shows vaccines are sufficiently effective in reducing hospitalisations and deaths in those vaccinated
- c. Infection rates do not risk a surge in hospitalisations which would put unsustainable pressure on the NHS, and
- d. The assessment of the risks is not fundamentally changed by new Variants of Concern.

While each step is expected to have a 5 week duration, before, we move from one step to the next, the pre-defined criterion must be met.

We should always keep in mind that we (humans) have been dancing to the virus' tune. Until such times as the vast majority of the global population has been vaccinated, the virus will continue to mutate, and new variants will appear. Some will be of little consequence although others may present a significant threat. We have seen this with what has been referred to as the South African and the UK variants. It is possible that a variant may appear for which the vaccines are not as effective as they are against the current known mutations. Should this occur, I would anticipate that further restrictions and even lockdowns may be considered by governments around the world while adjustments are made to the vaccines.

1.2.5 Do you feel the precautions revolving around social distancing, particularly mask wearing, is here for good?

No, not on a permanent basis. However, one of the silver linings on this rather nasty dark cloud we have been enduring over the last 12 months is there is much less evidence of colds and flu this winter. That is not a coincidence and I am sure that the Hands-Face-Space strategy can claim much of the credit. Even so, we need to be more flexible in the western democracies and be prepared to respond in a much more positive way to mask

wearing and social distancing as and when future pandemics come our way. There has undoubtedly been resistance to mask wearing, or not wearing a mask properly (e.g. not covering the nose or just using the mask as a chin support etc.), so I would like to finish this section on Hands-Face-Space with an extract from my book:

Born in 1933, the now eighty-seven year old June Selway remembers living through World War II. Immediately following the declaration of war, in the interest of their safety, many children were evacuated from UK cities. When comparing the air raids of the 1940's with the situation in 2020 and the fuss some make about wearing a face mask, June simply says:

“Try being evacuated from your home for years because of a blitz!... 'running to the air-raid shelter most nights'. 'Just wear your masks....it's little enough to do'.”

1.3 Lockdown

1.3.1 Is this the last lockdown? - Can business/society continue with constant interruptions - with vaccine roll out do we need to learn to live with an endemic disease as we have had to with others such as Polio/Malaria /TB

Please read my answer in conjunction with the answer in section 1.2.4.

The SARS-CoV-2 virus that causes Covid-19 is not going away any time soon so the threat will always be there. However, I believe it will become a treatable disease and may also necessitate an ongoing programme of vaccinations like seasonal influenza. We have seen the eradication of Smallpox and while Polio and TB are still around, they are no longer the threat that they used to be. Like Smallpox, their eradication is certainly not beyond the bounds of possibility.

It is also interesting that the three diseases mentioned in the original questions (Polio, Malaria / TB) are transmitted in different ways. Polio is via contaminated faeces: Malaria is vector borne (i.e., via mosquitoes) and TB is microscopic droplets released into the air – a bit like Covid-19 or influenza.

1.3.2 Following your extensive global research what advice would you provide the UK Government on the release of lockdown to avoid LD4

As I previously mentioned, there is a possibility albeit small, that future lockdowns may be unavoidable. That said, we should certainly draw encouragement in the UK that the vaccination programme is doing so well. But with the virus working to its own agenda vis-à-vis mutations, we still need to be cautious. I certainly agree with Boris Johnson's softly-softly approach and all the time the Key Performance Indicators are all moving in the right direction, that is the way we should continue. However, the Government needs to be prepared to put on the brakes and maybe even go into reverse if any of those KPI's start swinging in the wrong direction.

1.3.3 How will democratic countries manage civil disobedience as time goes on, especially during the summer period if there are more lockdowns.

What is civil disobedience? Is it an individual breaking quarantine regulations, a small group of individuals defying lockdown protocols by partying, a full blown demonstration or even a riot? We have seen a variety of events occurring in several countries to date especially when people feel their civil liberties are being threatened by whatever pandemic related restrictions their respective Governments impose. In extreme cases, some people have died from injuries they have incurred.

Several high profile figures who have been caught breaking lockdown restrictions (e.g., dining and partying) invariably say they are sorry. However, it is never really clear whether they are truly apologising for their actions or just sorry they have been caught.

Firstly, governments need to accept that this can and probably will happen, even in the most reserved of communities, and they need contingency plans in place. Some countries introduced heavy fines in the early stages of the pandemic although the UK was slow to introduce such initiatives.

I have heard it suggested that in extreme cases offenders should be imprisoned. But this creates another set of problems in terms of where do you accommodate them as prisons are often over crowded anyway. Moreover, prisons, like care homes, are also another example of a concentration of risk for spreading the pandemic so you could be potentially exacerbating that risk.

Personally, I think they should be heavily fined, named and shamed. In the case of large civil disturbances, police may feel it prudent to avoid direct confrontation, but instead gather evidence using video, in the same way as they do with hooligans at football matches. This would be no different to the UK riots that occurred in 2011. More than 3,000 were ultimately arrested after the event, seven hundred of whom were remanded in custody. In addition to collecting video evidence, police also searched social media to help identify rioters and looters.

1.3.4 Is there a way for governments to be forced to lock down effectively, with particular reference to your comment around closing airport

Each government around the world, whether democratic, autocratic, oligarchy or anarchistic should be in control of how they manage the pandemic. While other countries may criticise their actions or lack of actions, most countries, perhaps with the exception of European Union member states, are not accountable to a higher authority. So, unless those governments are changed, by fair means or foul, and the incoming government are in favour of the introduction of more restrictions, such as airport closures, then I don't see a way of forcing them onto a particular country. Although not specifically pandemic related, we are currently seeing countries around the world expression their disapproval with Myanmar's military takeover, but I don't for a moment think that the military junta will take much if any notice.

1.4 Post Pandemic

1.4.1 when do you think it will be "Over"?

When the pandemic first started, the media were constantly asking the politicians, clinicians, and scientists *"how long will the pandemic last"*. It took them quite a while to realise, nobody really knows. It certainly didn't help when high profile individuals expressed opinions that were widely inaccurate. For example, Donald Trump proclaimed that it would all be over by Easter 2020.

A lot of people have applauded the way in which New Zealand has managed the pandemic. However, the end of February 2021 saw the city of Auckland and its population of 2 million put into lockdown because three Covid-19 cases of the English variant followed a by fourth case of unknown origin had been discovered. All the time we are still going through the global process of rolling out the vaccines, this could happen anywhere in the world and if it is not dealt with quickly and efficiently then we are likely to see infection spikes that could evolve into waves.

Putting to one side the anti-vaccine elements of the population, even if the entire UK population has been vaccinated, the pandemic is unlikely to be declared as 'over' by the World Health Organisation until the vaccination programme has been completed. In my opinion, this is unlikely to happen before 2023.

1.4.2 What constitutes the pandemic being over - or do we just have to live with covid for ever?

Please see my response to section 1.4.1 above.

You should also note that Covid-19 is likely to be around 'ad-infinity', like seasonal influenza, although booster vaccines should be available if needed to manage any virus mutations which pose an additional threat to mankind.

1.4.3 How near to our previous 'normal' is it reasonable to expect us to get back to ??

Yes, we have heard a great number of references to the "new normal" over the last twelve months. I have never really been sure whether that was a transient state or a final destination.

Within the UK, the government has published its roadmap for the lifting of lockdown restrictions. So, let me first talk about tourism and travel outside of the UK. For the foreseeable future, I believe that there will be countries demanding that all arrivals are quarantined especially if they have travelled from a global Covid-19 hotspot. There is already a roaring trade going on with criminals selling authentic looking negative test results which may affect your entry conditions when you arrive in a country. It now appears that some countries have entered a dialogue regarding vaccine passports, including the UK.

I remember when I first travelled to West Africa back in the 1980's, before being permitted to enter The Gambia, I had to present a valid yellow fever vaccination certificate. I believe we will also see countries demanding a similar proof for a Covid-19 vaccination. Can I suggest that you take a look at the BBC Travel Show which is available

on iPlayer – the episode entitled “[Tanzania’s Pristine Coral Reefs](#)” as it looks at the prospect of cruise lines demanding proof of vaccinations.

The other aspect of normal life I think it is worth focusing on is whether or not town and city centres will return to their former state. Alas, I think we will see changes. First, many of the familiar brand names on the high street will have disappeared – just simply victims of the pandemic although it looks as though some may survive in an online form. Then we have all the prestigious office blocks that have had to allow their employees to work from home. For the last 12 months, city centre dry cleaners, coffee shops, sandwich bars, pubs and restaurants among others that previously relied upon this guaranteed footfall that was synonymous with all these office workers have been struggling even when they have been permitted to open. Moreover, with many companies asking the perfectly valid question of ‘do we really need all this expensive city centre real estate’, some have definitely indicated that working from home will be maintained as an option for their employees. So, expect further city centre business closures as a direct result of more and more people being home based.

Taking a paragraph from my book, I would like to complete this section by saying:

What we do know is that Covid-19 has already proved to be a massive agent of change. But haven’t we been here before? Didn’t we have to come to terms with a new normal after World War I, then again after the Spanish Flu, not to mention the Great Depression, World War II, the Cold War, the 2007-8 Financial Crisis, the ever growing Cyber Threat and, in the European Union, BREXIT. I believe that in reality, while the availability of a vaccine, cure, or treatment, will be key factors, we will pick ourselves up, dust ourselves off and just get on with whatever personal and professional parameters that life presents us.

1.4.4 Do you think the experiences of the past year will change the priorities, strengths and weaknesses of future business leaders?

For those businesses that survive the pandemic, I sincerely hope so. It is my fervent wish that politicians and business leaders don’t just breath a sigh of relief when the pandemic is over and promptly forget all about it. Instead I would like to think that they would actually start preparing for the next pandemic. Rest assured, there will be one.

The pandemic has been a massive wake-up call for us all both in our personal and professional lives. In the same way that every government should undertake a post-pandemic review of how their respective countries performed, so too should businesses. This of course could be influenced by what economic stimulus support the country has offered where a business actually resides. There is a very useful website called the Institute for Government that provides a comparison of the support packages offered by a number of leading nations which you can refer to by clicking [here](#).

1.5 Vaccinations

1.5.1 What are your thoughts on getting the world vaccinated? How do you think corrupt governments etc. may hinder the process?

There are some parts of the world where vaccination programmes may well struggle. I do fear that in those less stable countries, vaccinations may be offered to “the in-crowd” or those who are more affluent rather than the more needy. I would not have counted Argentina among the less stable countries and yet the Health Minister has resigned after reports emerged that he had facilitated vaccination queue jumping.

Going to the other extreme, how will people who are living in conflict zones actually fair? For example, what will happen in the Yemen while the conflict still rages. With much of the country in *rebel* hands, how can that be managed. Does that mean people living in government controlled parts of the country may be vaccinated while those in the rebel held areas will not? In Africa and parts of Asia health workers conducting non-Covid vaccination programmes such as Ebola and Polio have been attacked and sometimes killed. So, as you probably realise the global vaccination programme will have some serious issues to address.

1.6 Strategy

1.6.1 How could we prioritise the nations future economy without "abandoning" certain vulnerable groups e.g. care homes

Care homes is one of the concentrations of risk I write about in my book. But while the number of care home occupants who have been infected and died has been tragic, it has been far from just a UK problem. Again, globally we need to learn the lessons of how other countries have managed. Hong Kong is an example of successful care home management in terms of the very low case count but in isolating the homes and their residents, it puts horrendous psychological pressures on those residents and their families. I do not see an easy way out of these as, potentially, you’re damned if you lockdown these homes and you are damned if you don’t.

1.6.2 Am I right in thinking that the Government did have a pandemic preparation document that had been written some years ago, but that it was "side-lined" and ignored so that we were even more poorly prepared than we should have been.

No, that was a rumour doing the rounds last year which is not true. The UK has an influenza pandemic plan which is in the public domain and can be downloaded from: [UK Influenza Pandemic Strategy 2011](#). Even, if you just read the ‘Table of Contents’, you will see that listed Government and Health Service actions were not a million miles away from the actual response to the Coronavirus.

The plan was tested in 2016 (see section 1.1.2). As the name suggests, it was a plan to deal with an influenza pandemic rather than any other type of pathogen such as a coronavirus.

The challenge that countries have when confronted by a pandemic caused by a novel emerging infectious disease, is that at the point that it is first identified, they cannot have already put together a detailed plan specific to that contagion because it was previously unknown. Here we are 12 months after the Coronavirus was first discovered but we are still learning about the contagion. Influenza on the other hand, we have lived with for hundreds of years. That doesn't mean we like it but we understand it even when a novel influenza virus comes along.

1.6.3 what do you think the gov has got wrong?

Plenty, but there is no short, sharp answer to the question. To some extent I believe politics has got in the way. Some have criticised the government for being too slow to act while others have complained about not having enough notice when restrictions have been imposed. Moreover, while some parts of society have been demanding lockdowns to protect lives, others have been demanding an end to lockdowns to protect jobs. So, it just goes to illustrate that you cannot please all or the people, all of the time.

Conversely, the government has got some things right which other countries have not. After a slow start to testing, the UK is now out-testing the rest of the world, per capita. The vaccine management is another success story, and it is the UK that is leading the way on identifying how the SARS-CoV-2 virus is behaving vis-à-vis mutations. Conversely, while German was praised for its excellent start with its pandemic management, it is now becoming the victim of its own prevarication to the detriment of, among other things, its vaccine rollout.

But there are still many unanswered questions such as why are the BAME members of society at a greater risk of dying from Covid-19.

I mentioned in the post webinar Q&A session that the highly respected medical faculty of John Hopkins University had published a report in October 2019 which was entitled "[Global Health Security Index](#)". It measured every country against six health related criterion one of which was "Rapid response to and mitigation of the spread of an epidemic (pandemic)". Every country was scored on a scale of 1 to 100 with 100 being a perfect score. The UK was first in this category at 91.9% and the USA was second at 79.7% and yet neither country has covered itself in glory in terms of its response. This would suggest that both countries have made mistakes and it is my intent to publish a paper in due course as part of a PhD submission that focuses on this very point. So please watch this space.

What is also worth noting is the government is in the process of setting up a new organisation called the National Institute for Health Protection (NIHP). The NIHP will bring together the existing health protection responsibilities discharged by Public Health England (PHE) with the new capabilities of NHS Test and Trace, including the Joint Biosecurity Centre, creating a single agency with a razor-sharp focus on COVID-19 and the challenges posed by domestic and global threats to health, now and in the future.

So, it looks as though the UK is taking the challenge of preparing for the next pandemic seriously even before the current one is over. Very encouraging news.

1.6.4 How do we prepare for the next one?

First accept the fact there will be a 'next pandemic' and which could happen at any time. Learn all the lessons from Covid-19 and either revisit and update your existing plans

or, if you didn't have a plan, create one. Don't forget to test your plans and do not look upon this as a one off exercise – it should be a process of continuous improvement.

1.6.5 What is the point of furlough? Do we have so many dormant, dead businesses?

In my view, the point of furlough has been almost to moth ball businesses that were either not permitted to operate or were unable to operate. In safer times, each would normally play its part in supporting the economy. Without the furlough scheme and other governmental support initiatives, many businesses will have already gone under.

For example, the hospitality industry is a classic example as are events and performing arts. There has been lots said and much has been written in the media about the plight of bars, cafes and restaurants but not so much has been heard about the performing arts and the events industry. While theatres, concert halls and cinemas have been ordered to remain shut during lockdown, it is not only the majority of performers who strut their stuff on stage or in front of a camera who are out of work. There is also a huge unsung army that work behind the scenes to make it all happen. The same is true for outdoor events such as concerts in Hyde Park or Glastonbury. Without this currently out-of-work backstage army, these events just could not go on. By furloughing them, it provides both the employers and the employees with reasonable prospects of being able to pick up where they left off before the pandemic started.

So, when the economy does open up again, most of these businesses should be able to restart and in turn support the economic recovery.

1.7 Opinion

1.7.1 Should China be paying global reparations?

As we cannot be sure at this point in time that the virus actually originated in China, I think it is unreasonable to start considering reparations. As I mentioned in the webinar, evidence of the Coronavirus have been traced back to March 2019 in Spain by the University of Barcelona around nine months before it exploded onto the scene in Wuhan.

1.7.2 You talked about how you predicted the next pandemic to be influenza. Do you think this is still due in our lifetime or in a few generations

Yes. But there are two key unknowns:

- When (this year, next year, in 10 years time), Mother Nature unfortunately does not publish a timetable of forthcoming events of natural disaster (including pandemics). But we know from history that it will happen.
- How dangerous will the next influenza pandemic be to humans. For example, Swine Flu in 2009 infected a large proportion of the global community but in terms of fatalities it was not worse than seasonal flu. But the Hong Kong flu (1968), Asian Flu (1957-58) and the Spanish Flu (1918-19) killed one million, two million and fifty million respectively.

There is a third component that I did not mention in the webinar, but we should certainly strive to understand better. There is a consensus among scientists that the way humans

are exploiting the planet and how we are often at odds with nature is increasing the likelihood of pandemics, especially novel viruses. For example, we have now seen three potentially fatal novel coronavirus since the turn of the millennium. Before that, the worst thing we could catch from a coronavirus was nothing worse than a cold. So what has changed that has resulted in these potentially fatal coronaviruses emerging one after the other over a seventeen year period ?

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To pre-order your own copy of Bob' new book, "*Business Continuity and the Pandemic Threat – Learning from Covid-19 while preparing for the next pandemic*", please [click here](#).

To order your own copy of Bob's original book "*Business Continuity and the Pandemic Threat – Potentially the biggest survival challenge facing organisations*" that predicts the pandemic, please [click here](#).

2 About the presenter – Robert Clark MSc FBCS FIBCM FISRM

Bob Clark describes himself as a Business Continuity Consultant, bestselling author, trainer and visiting university lecturer having started his career with the Royal Naval Scientific Service. An experienced manager, Bob has directed large, high profile programmes and projects for prestigious organisations across a variety of industry sectors. In addition to fifteen years with IBM, this includes assignments with Barclays Bank, Capital One, Zurich Insurance, Cairn Energy, Centrica, British Airways, UK Government, Italian Ministry of Finance, Government of Malta, Transport for London and De la Rue.

Between 1999 and 2004, he was the Head of the Project Management Practice for DMR / Fujitsu Consulting. For a five year period, he held the position of Resourcing Director for Fujitsu Consulting Northern Europe managing around 1,500 consultants across 5 countries. This position was relinquished following a merger.

Bob's experience is multi-national and multi-cultural having worked in fifteen different countries. His communication and mentoring skills are excellent and he has a track record of engaging at all levels of organisations which includes two Prime Ministers.

During his career, he has been presented with three professional fellowships - Fellow of the Institute of Business Continuity Management (FIBCM), Fellow of the British Computer Society (FBCS) and a Fellow of the Institute of Strategic Risk Management (F.ISRM). He is also a Member of the Security Institute (MSyI). Bucks New University awarded him a Master of Science degree in Business Continuity, Security and Emergency Management in 2012.

It all started in 1973 when he joined IBM as a trainee computer operator. Big Blue was one of those forward thinking organisations that practised business continuity management (BCM) long before the expression had even been coined. But back then, in the 1970s, with the exception of periodic fire evacuation drills, BCM was simply referred to as disaster recovery and was entirely focused on protecting the IT environment, along with the associated electronic data.

It was less than 12 months into his 15 year IBM career that Bob first became exposed to BCM. Both local and overseas disaster fall-back trials were regular features in the IBM calendar and often involved testing its recovery capability by transferring UK operations to Germany or the Netherlands. During his time with the corporation, the closest the operation came to a real disaster fall-back was in 1974, during the UK miners' strike, when power interruptions became common place. It was while he was with IBM that he went to the Netherlands for a two week assignment that lasted for three years.

Bob's 15 years with IBM were followed by a variety of positions including 11 years with Fujitsu Services (formerly ICL), working with clients on BCM related assignments. In 2005 he was tasked with validating Fujitsu's own BCM state of readiness across Europe. He is now a freelance business continuity consultant and spends much of time working with clients in Malta and the Middle East.

In 2014 Bob became a part-time visiting lecturer at Manchester Metropolitan University, where he has been delivering BCM to both undergraduate and postgraduate students,

alongside his consultancy commitments. It was in the same year that his first publication “In Hindsight – a compendium of business continuity case studies” was published and reached the Number One spot in the Amazon best sellers lists.

Since that early success, Bob has published a further four books including the best-selling “Business Continuity and the Pandemic Threat – Potentially the biggest survival challenge facing organisations”

3 Book Publications

Bob’s published works include one book that has reached the Amazon Number One best sellers lists and a second book which has become a world best seller.:

“IN HINDSIGHT – a compendium of Business Continuity case studies” (2014), published by IT Governance Publishing. ISBN-13: 978-1849285919. Reached No 1 spot on Amazon best sellers lists

“VALIDATING YOUR BUSINESS CONTINUITY PLAN – Ensuring your BCP actually works” (2015), published by IT Governance Publishing. ISBN-13: 978-1849287739.

“BUSINESS CONTINUITY AND THE PANDEMIC THREAT – Potentially the biggest survival challenge facing organisations” (2016), published by IT Governance Publishing. ISBN-13: 978-1849288194. Now a world best seller.

“CRISIS MANAGEMENT - Is Social Media its new best friend or worst nightmare” (2018), published by KDP Publishing. ISBN-13: 978-1980376859

“BUSINESS CONTINUITY AND THE PANDEMIC THREAT – Learning from Covid-19 while preparing for the next pandemic” – due to be published by ITGP in June 2021. ISBN to be confirmed

Robert is currently writing a book for publication that has the working title of **“ICT DISASTER RECOVERY – Entering the 5th Age of Computing”** which is expected to be published by ITGP in Q4 2021