

Coronavirus Pandemic and Knowledge Economy

Back in 2015 Bill Gates claimed in a lecture that experiences with the "Spanish Flue" (1918 – about 50 million dead), as well as the more recent "Ebola Pandemic" (2014-2016 – about 12,000 dead) obviously did not teach us the lesson.

Ironically, we are stronger in medical research, we have essentially better technology and communication facilities, and yet the experience with Coronavirus has demonstrated serious weaknesses – being responsible for massive, unnecessary loss of lives.

The critical element in facing epidemics is timely and proper reactions by authorities, and equally important, the degree to which the public is following the issued orders. Given the aggressiveness of this particular virus, both elements would qualify as cases where we failed on the ground of common sense. Most authorities acted indecisively, late and inconsistently, while the public reacted with indifference, often disregarded the issued decrees and instructions. Therefore, after realizing the dangerous public reactions, the authorities had to get tougher, but lots of damage has already been done.

However, China, as the source of the virus, reacted most appropriately and achieved very good results. The same should be said for Singapore, and partly South Korea, while most of European countries, particularly Italy, Spain, UK, as well as the USA, performed quite irresponsibly, and are

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The Coronavirus

The new coronavirus disease outbreak, which originated in Wuhan, China, developed into global pandemic rather quickly. As of March 26, 2020, 488,289 confirmed cases had been recorded with 22,069 deaths from the disease worldwide, according to the World Health Organization (WHO). Although most of the affected will be fine, for the more vulnerable parts of population, primarily above 65, it could mean death.

Now, we all have to mobilize to SLOW the virus down, because the slower it moves, the better our hospitals can cope, and the more lives will be saved. With countries facing shutdowns, like Italy and China, humanity is about to face serious adversity and that can either split us apart in fear, or unite us in common purpose and solidarity.

What is a coronavirus? The coronavirus family causes illnesses ranging from the common cold to more severe diseases such as severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS), according to WHO. They circulate in animals and some can be transmitted between animals and humans. Several coronaviruses are circulating in animals and have not yet infected humans. The new coronavirus, the seventh known to affect humans, has been named COVID-19.

What are the symptoms? Common signs of infection include fever, coughing and breathing difficulties. In severe cases, it can cause pneumonia, multiple organ failure and death. The incubation period of COVID-19 is thought to be between one and 14 days. It is contagious before symptoms appear, which is why so many people get infected. Infected

patients can be also asymptomatic, meaning they do not display any symptoms despite having the virus in their systems.

Where did it come from? China alerted the WHO to cases of unusual pneumonia in Wuhan on December 31. COVID-19 is thought to have originated in a seafood market where wildlife was sold illegally. On February 7, Chinese researchers said the virus could have spread from an infected animal to humans through illegally trafficked pangolins, prized in Asia for food and medicine.

Coronavirus: differences by countries

The Chinese government responded to the outbreak by placing Wuhan area (roughly 50 million people in Hubei province) under quarantine.

This quarantine is now slowly being lifted, as authorities watch to see whether cases will rise again. China has borne the brunt of Covid-19 infections. As of March 11, Chinese health authorities had acknowledged over 81,102 cases and 3,231 deaths – most of them within the province of Hubei. On March 17, China recorded just 39 new cases of the virus – a remarkable slowdown for a country which, at the peak of its outbreak in mid-February, saw more than 5,000 cases in a single day. But while things were slowing down in China, the outbreak started picking up in the rest of the world.

On 4 February, Singapore's government reported that the virus had spread into the local community - and the Yong Thai Hang Chinese medicine shop was its first cluster, with a local tour guide and that enthusiastic saleswoman falling ill. From that one shopping trip, nine people became infected, including the saleswoman's husband, her six-monthold baby and their Indonesian domestic helper. Two other staff members also caught it. They have now recovered, but it could have been much worse if Singapore didn't have a sophisticated and extensive contact tracing program, which follows the chain of the virus from one person to the next, identifying and isolating those people - and all their close contacts - before they can spread the virus further.

Almost two months into the outbreak, there have been no deaths in Singapore. Singapore has been credited for its healthcare services, as well for its contact tracing. It has bought time, so doctors could treat the people in hospital who really needed treatment, without overwhelming healthcare services the way it happened in Wuhan.



After 2 months of mostly waiting and passively observing while the COVID - 19 alarm sounded ever more loudly, many countries in Europe have suddenly implemented strict measures to slow down the spread of the disease. Thousands of events have been canceled; schools, restaurants, bars, and clubs have been closed; and transit systems are at a standstill. With some delay, the countries saw little or no alternative. The case numbers exploded, and, in turn, so did the number of deaths. Hospitals in Italy, the hardest-hit European country, are overburdened, forcing doctors to make agonizing decisions about whom to treat and on whom to give up.

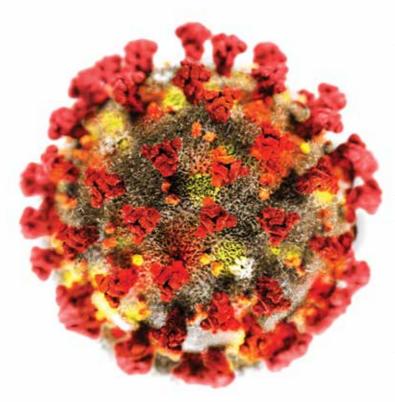
The experiences of South Korea, Hong Kong, and Singapore hold important lessons, having turned their epidemics around without the authoritarian tactics used by China. Yet some of the strategies adopted in those countries are missing elsewhere: widespread testing to identify positive cases, tracing their contacts to test or quarantine them, and encouraging - or forcing - infected people to isolate themselves.

China, as the source of the virus, reacted most appropriately and achieved very good results. There's little doubt that social distancing alone can greatly reduce virus transmission: It was essential to bringing China's raging epidemic under control in a matter of weeks, according to the report of a joint mission of WHO and the Chinese Government.

Other countries are now deciding how far to take that approach. Many began by banning gatherings of more than 1000 and then successively, but quickly reduced that number to 5!! Some have shut theaters, cinemas, restaurants, and gyms, as well as all places of worship. Germany has closed most non-essential stores but extended hours for supermarkets to reduce the number of shoppers at any one time. In some countries, shops are reserving the first hours of the day for older customers at high risk of severe disease.

School closures may have the added benefit of forcing more parents to stay home. On the other hand, some children may end up being looked after by elderly grandparents, and closures may force badly needed health care workers to stay home.

Moreover, children could end up missing months of education and many depend on free school lunch programs. That's why some public health experts say measures should be flexible. Austria and the Netherlands have sent most students home, but schools remain open for children of those working in vital sectors. Singapore has halved class sizes, instituted strict hygiene measures, and staggered break periods to reduce playground contact.



Several countries have now resorted to an extreme measure: forcing almost their entire population to stay at home. China led the way in late January, when it penned in more than 50 million people in Hubei province. Some experts argued that Western countries could never enforce such draconian measures. On the other hand, Italy, shocked by the strain on the health care system in the north of the country, followed suit on March 9.

Other countries have beat back the virus without such drastic measures. One example is South Korea, which has seen confirmed infections drop from 909 cases on February 29, and as of March 24, it had a case fatality rate of 1.33 percent which is lower than WHO's global fatality rate of 4.34 percent.

"South Korea is a democratic republic; we feel a lockdown is not a reasonable choice," says Kim Woo-Joo, an infectious disease specialist at Korea University.

Instead, the key to success has been a large, wellorganized testing program, combined with extensive efforts to isolate infected people and trace and quarantine their contacts.

A couple of years ago, Chandran Nair, founder and CEO at Global Institute for Tomorrow, wrote about the need for strong states in a turbulent 21st century to resolve the wider sustainability crisis.

Along with a strong rule of law, strong states include strong institutions, from labor unions and independent think tanks to respected universities and a robust civil society eco-system. The coronavirus pandemic has bolstered the argument for the strong state, especially in times of crisis like the present one.

A strong state implements stringent policies, sometimes before their need is immediately obvious. As some public health experts have noted in the instance of the coronavirus outbreak, actions to slow the spread of disease may seem like an overreaction in the moment, but have quickly proven to be most effective.

Both China and Korea have brought us examples showing that the lessons of strong states, competent governance, and strong action are relevant to all kinds of political systems. Notably, the measures differ based on scale. In China, the actions taken were draconian. The big country has clearly put collective welfare over individual rights – and at the end it helped every single individual, and prevented many to die.

Hong Kong also shows the importance of strong public signals. Early in the crisis, the government closed schools, canceled public events, told all civil servants to work from home, and strongly encouraged private businesses to let their employees do the same. In doing so, the government set a clear baseline on social distancing that appears to have halted community transmission.

The Worrying Future

For many, the biggest question is: When, and how, will this end? It's now clear that humanity won't get rid of COVID-19 as it did with SARS (severe acute respiratory syndrome) in 2003, says Mark Woolhouse, an epidemiologist at the University of Edinburgh: "We will be living with this virus indefinitely." Keeping it at bay might require locking down society for many months, at staggering costs to the economy, social life, and mental health, at least until a vaccine is available. That is inconceivable to Woolhouse and many others.

An alarming study from the Imperial College London, posted online on March 16, concluded that even a mitigated epidemic would still overwhelm health care systems and cause at least 250,000 deaths in the United Kingdom and more than 1.1 million in the United States. Suppressing the virus



by combining all available measures, including school closings and social distancing of the entire population, is the "only viable strategy at the current time," the team wrote.

Closing Thoughts

This pandemic is not only an immediate medical emergency of huge proportions. Its unforeseeable impact on society and economy actually opens many questions which we have been disregarding or brushing under the carpet.

What could be done this time to learn the lesson and start addressing the issues of sustainability in a socially responsible fashion? These issues are neither easy nor simple, but we have to address them with common sense, and to resolve them efficiently and acceptably for the entire society. We are referring to globalization on daily basis, but why don't we accept the fact that it implies many changes in behavior of every individual? And these changes are linked to the way we understand how society functions and

how the wheels are turning in the economy.

While in the past interaction among countries was so occasional that it did not matter that they had very different internal economic and political systems. Now the interaction is so intense that differences do matter a lot, and this is often the cause of friction or even conflict - creating functional disturbances affecting the parties involved, and often also the immediate or even broader international environment. For all kinds of reasons - even in the long term perspective - it is difficult to imagine that all countries around the globe would have identical political systems. But what matters will be the quality of leadership and level of responsibility and self-control by the citizens, not only in responding to epidemics and pandemics, but equally to other challenges determining inclusive socio-economic relations within and among countries.

- This is an abridged version of Knowledge Economy Network weekly brief.

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