

International
Institute of
Social Studies

Erasmus

Working Paper
No. 667

COVID-19: A Biopolitical Odyssey

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December 2020

ISSN 0921-0210

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Table of Contents

ABSTRACT	4
1 INTRODUCTION	5
2 A TIMELINE: FROM OUTBREAK TO ‘PANDEMIC’	6
3 PANDEMIC: A DESCRIPTIVE TERM GAINS VIRULENCE	10
4 THE ‘NOVEL’ CORONAVIRUS: WHAT’S IN A NAME?	14
5 DOING IT WITH NUMBERS	16
6 HOW TO INCUBATE A PANDEMIC: TRAVEL ABROAD AND SEED ALONG	20
7 EPIDEMICS AS BIO-POLITICAL TESTING GROUNDS	22
8 CONCLUDING REMARKS	28
suspended in time we wait	29
REFERENCES	29

Abstract

This paper examines how and why a zoonotic, ‘novel’ coronavirus disease, Covid-19, became a pandemic of such magnitude as to bring the world to a standstill for several months. Though the WHO inaccurately projected Covid-19 as the first pandemic by a coronavirus, it had been preceded by two others also caused by a similar coronavirus: SARS (severe acute respiratory syndrome) in 2002-03 and MERS (Middle East respiratory syndrome) in 2014. In fact, following the SARS pandemic, the possibility of the emergence of pathogenic, virulent, ‘novel’ strains had been predicted. Therefore, the emergence of Covid-19 coronavirus should have come as no surprise, yet ‘preparedness’ to deal with the emergency was seriously lacking.

A major reason for the worldwide escalation was due to the inordinate delay in Covid-19 pandemic declaration by the WHO till geographical spread and severity had heightened considerably. This enabled the justification of draconian ‘suppression’ measures based on questionable science. This paper argues that the ‘lockdown’ strategy coming after the virus had seeded across countries initiating local transmission, was a political decision wrapped up in epidemiological parlance to give it a scientific veneer. Using the Foucauldian interpretation of the public health responses to three diseases – leprosy, plague and smallpox – as models for three distinct forms of power techniques, this paper explores the biopolitical reasons for the adoption of the ‘plague’ model of governance which exercised ‘in full’, a transparent, unobstructed power as the almost universal blueprint across the world to contain Covid-19.

Keywords

Covid-19, coronavirus, pandemic, World Health Organization, disease modelling, capitalism, biopolitics.

COVID-19: A Biopolitical Odyssey ¹

1 Introduction

This paper examines how and why a zoonotic, ‘novel’ coronavirus disease, Covid-19, became a pandemic of such magnitude as to bring the world to a standstill for several months. The paper begins by relating the timeline of the development of the outbreak in the Chinese city of Wuhan in late December 2019 up to 11 March 2020 when the WHO declared it a pandemic. During this period, though there was evidence of human to human transmission, with little restriction on air travel and tourism, the virus could spread and seed in different countries initiating local transmission. The paper demonstrates that the WHO inordinately delayed the declaration of a pandemic by changing its classical epidemiological definition to include severity and virulence.

It further argues that the lockdown strategy of ‘suppression’ recommended by a team from the Imperial College, London, that was proposed within a few days of the WHO’s declaration, was based on mathematical modelling with limited and selective data and questionable assumptions. Hence, the lockdown strategy coming two and a half months after the announcement of the outbreak in China was of questionable value in containing country level epidemics across the world. Using a Foucauldian framework, the paper then examines the possible biopolitical reasons for selection of the ‘plague model’ strategy of incarceration and argues that this brings in a new ‘population’, the ‘consuming-classes’, into the ambit of those to be ‘let die’ as a partial resolution to the ecological distress that our shared biosphere is facing. The conclusion is, as the world waits for the promised liberation through a vaccine, the reasons for the pandemic, rooted in the process of capital accumulation and the ensuing destruction of the global ecosystem that makes zoonoses a recurring imminent threat, appears to have been all but forgotten.

¹ I thank Dr. Onkar Mittal for generously sharing of his insights and work on Covid-19. I gratefully acknowledge the members of the Editorial Board of *Development and Change* for their thoughtful feedback.

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2 A timeline: from outbreak to ‘pandemic’

In late December 2019, the Wuhan Center for Disease Control and Prevention (CDC) in central China received reports of a ‘cluster’ of patients with viral pneumonia of unknown etiology from Wuhan city (National Health Commission of the People’s Republic of China, 2020). Subsequently, on 30 December, an urgent notification was sent by the Wuhan Municipal Commission to the medical institutions under its jurisdiction. The next day its website carried an announcement of an ‘epidemic situation’, linking it to the ‘South China Sea Food City’ (Jinyi, 2019). People in the province were urged to avoid enclosed places or to ‘gather’ and to wear masks while going out (National Health Commission of the People’s Republic of China, 2020). On 1st January 2020, the Wuhan’s Huanan ‘wet market’² was closed as the probable source of infection, both because of an exposure history in the current outbreak and because the earlier 2002 pandemic of SARS (severe acute respiratory syndrome), whose clinical picture resembled the new illness,³ was traced to the animal market in the Guangdong province of southern China.⁴

The World Health Organization (WHO) was formally informed by the Chinese authorities only on 3 January (National Health Commission of the People’s Republic of China, 2020).⁵ On 5 January, the WHO noted cautiously ‘an exposure link to animals’ but found ‘no evidence of *significant* human-to-human transmission’ or infection among health care workers (emphasis added) (World Health Organization, 2020a no page). The WHO did not recommend any specific measures for travellers and advised against imposing travel or trade restrictions on China.

The first publication based on the initial cohort of 41 patients from Wuhan (hospitalized between 16 December 2019 to 2 January 2020) confirmed that the clinical presentation was similar to the previous SARS disease (Huang et al. 2020). The authors noted that, as of 24 January, there were already 835 laboratory confirmed patients, with number of deaths rising ‘quickly’ (p.501). Data showed evidence of human to human transmission including infection among health-care workers (p.502). Considering the ‘exported cases’ from

² The Chinese ‘wet markets’ sell freshly slaughtered meat fish, fruits and vegetables whereas the ‘dry’ markets sell grain and other dry packaged goods. Some of the ‘wet markets’, such as that in Wuhan city sell wild animals such as snakes, beavers, badgers, civet cats, foxes, peacocks and porcupines, both slaughtered and live (Yu, 2020).

³ On 30 December 2019 Li Wenliang, an ophthalmologist from Wuhan Central Hospital, had circulated a message on a local chat app warning colleagues of a new ‘SARS-like’ disease for which he was reprimanded by the Chinese government, asked to apologize for spreading ‘rumors’ and to retract his statement. Tragically, he became infected with the virus and succumbed on 7 February 2020 (BBC News, 2020).

⁴ Later bats and palm civets had been indicted as the natural and intermediate reservoirs of the SARS virus (SARS-CoV).

⁵ The WHO in their communique dated 5 January 2020 on the outbreak (World Health Organization, 2020a) glossed over the date of notification by the Chinese authorities. Later, in early July 2020, the WHO updated the timeline by recording that it was the WHO China Country Office that had informed them on 31 December 2019 and not the Chinese authorities (AFP, 2020).

Wuhan to many other provinces in China and other countries,⁶ the authors warned of a global health threat with ‘pandemic potential’ and recommended the need for surveillance to monitor for ‘future host adaptation, viral evolution, infectivity, transmissibility, and pathogenicity’ (p.504). On 23 January 2020, a day before the Huang et al. study was published online, the Chinese authorities put the city of Wuhan with a population of 11 million on ‘lockdown’.⁷

On cue, the WHO convened a two-day meeting on 22 and 23 January of an ‘Emergency Committee’ to advise the Director-General on whether to declare a Public Health Emergency of International Concern (PHEIC) or not (World Health Organization, 2020b). Data presented by the Chinese authorities at the meeting showed an increasing number of ‘cases’ with a 4% mortality rate. The epidemiological picture showed fourth-generation cases in Wuhan, second-generation cases outside Wuhan and clusters outside Wuhan provinces indicating evidence of human-to-human transmission with an estimated R_0 (basic reproduction ratio or number) of 1.4 to 2.5.⁸ Yet the group of experts arrived at a consensus that the extent of human to human transmission was ‘still not clear’. Since ‘several’ members felt it was too early to declare PHEIC, it was decided to ‘consider a more nuanced system which would allow for an intermediate alert’ (p.3). As to travel advice, the one issued on 10 January which did not restrict travel or trade, was to prevail (World Health Organization, 2020c), even though, ‘exported cases’ in other countries had already been recorded and the WHO ‘situation report’ (SR)⁹ published for that day (23 January) warned that more cases were likely to be ‘exported’ and further transmission ‘may’ occur (World Health Organization, 2020d:1). The WHO assigned the risk of ‘this event’ to be ‘very high in China, high at the regional level and high at the global level’ (World Health Organization, 2020d:2) without providing the criteria for grading risks as low,

⁶ By 20 January 2020, Japan reported one, Thailand two, Republic of Korea one patient with confirmed diagnosis (Xinhua Net, 2020) and on 21 January one person was diagnosed in the USA (Holshue et al. 2020). They all had travel history to China.

⁷ The Chinese New Year celebrations and the spring festival was to begin from 24 January and end on the 30 January. To contain the outbreak, the holidays were extended until 2 February (The State Council, 2020).

⁸ ‘Generations of cases’ indicates transmission rates. R_0 known as basic reproduction ratio, refers to the contagiousness or transmissibility potential of an infectious or parasitic agent. It is defined as the expected number of cases that would be generated from one case in a population that has no immunity. $R_0 = 1$ means one infected person will infect one other person. Although R_0 is presented in a simplistic manner as, for instance, ‘an outbreak is expected to continue if R_0 has a value >1 and to end if R_0 is <1 ’, it is a complex metric arrived through mathematical modelling based on varied assumptions (Delamater et al. 2019:1). ‘ R_0 is an estimate of contagiousness that is a function of both human behaviour and biological characteristics of pathogens. R_0 is not a measure of the severity of an infectious disease or the rapidity of a pathogen’s spread through a population’ (Delamater et al. 2019 :3).

⁹ The WHO began publishing daily SRs from 21 January 2020 onwards with the last one (No. 209) published on 16 August 2020. Since then it publishes weekly reports.

moderate, high, or very high.¹⁰ Importantly, the report carried a footnote (number 3) which stated that SRs of 23, 24, and 25 January, ‘as originally published’, had ‘incorrectly summarized the risk for global level to be moderate’ and that it had now been corrected to ‘high’.¹¹ No information was provided as to why the previous assessment was considered incorrect or when the ‘error’ was noticed and corrected. It is difficult to accept this change in grading of risks post facto as a correction of an innocuous ‘error’. Grading is meant to convey levels of severity and has implications for planning preventive strategies by member countries and it is not clear what the implications were of a correction made days (weeks?) later.

Table 1 shows the weekly escalation and spread of infection from 23 January, the day of the WHO expert committee meeting as per data from WHO daily SRs. As can be seen, within a week (i.e. by 30 January), the number of countries (other than China) with confirmed cases had increased from 4 to 18. On this day the outbreak of COVID-19 was declared a Public Health Emergency of International Concern but travel advisory still did not restrict

TABLE 1
Countries, territories or areas with reported confirmed cases of 2019-nCoV
from 23 January 2020 to 11 March 2020

From WHO's daily situation reports (SRs)	China (cumulative)				Outside of China (cumulative)			
	Confirmed cases	Deaths	WHO Risk assessment	No. of countries	Confirmed cases	Deaths	Risk regional	Risk global
23.01.2020	571	17	v. high	4	7	0	high	Corrected* from moderate to high
30.01.2020	7736	170	v. high	18	82	0	high	high
06.02.2020	28,060	564	v. high	24	216	1	high	high
13.02.2020	46,550	1368	v. high	24	447	1	High	high
20.02.2020	74,675	2121	v. high	26	1073	8	high	high
27.02.2020	78,630	2747	v. high	46	3664	57	high	high
28.02.2020	78,961	2791	v. high	51	4691	67	v. high**	v. high**
05.03.2020	80,565	3015	v. high	85	14,759	266	v. high	v. high
11.03.2020***	80,955	3162	v. high	113	37,364	1130	v. high	v. high

* in the SRs of 23, 24, and 25 January, initially the WHO had assigned a ‘moderate’ risk at the global level and later the ‘error’ was corrected, and the risk upgraded to ‘high’ without providing the rationale or the dates when these changes were made.

** ‘local transmission’ reported for the first time in several countries.

*** date when the WHO declared it a pandemic.

tourism (WHO and UNWTO, 2020). By the first week of February, the number of countries affected as well as the number of confirmed cases had

¹⁰ Although the WHO’s SR of the previous day (22 January) mentioned that sixteen health workers had been infected (World Health Organization, 2020e), the report refrained from concluding that it indicated human to human transmission.

¹¹ These ‘original’ SRs published on the 23, 24, 25 January are no longer available in the public domain and only the ‘corrected’ versions are available.

increased further, and the first death was recorded outside of China. The event could now be described as a pandemic as per textbook definitions (more on this later).

Though in the next two weeks, the global situation appeared to stabilize, from the fourth week of February, the number of confirmed cases in countries other than China had almost quadrupled and the number of countries affected had doubled. Alarm bells began to ring and epidemiologists queried, , '[i]s the Covid-19 outbreak now a pandemic, whether or not the World Health Organization calls it that yet?' (Osterholm and Olshaker, 2020).

On 28 February, the WHO upgraded the risk status for 'Regional level' and 'Global level' to 'very high' (World Health organization, 2020f) again, without providing a rationale for the change in the grade. On that day, the number of cases in China was the lowest reported for that month but outside China, there were 4691 cases spread over 51 countries, with a total of 67 deaths. This was also the day that, for the first time, 'local transmission' was reported from several countries. By 5 March, the number of countries reporting increased to 85 with a total of 266 deaths (World Health organization, 2020g) but the WHO still refrained from declaring it a pandemic. It was only a week later, when the number of countries reporting the disease had increased to 113 and deaths had risen four-folds to 1130 (World Health organization, 2020h), that the WHO finally decided to term it a pandemic.

3 Pandemic: a descriptive term gains virulence

In the media briefing of 11 March 2020, the Director-General of the WHO provided the rationale for declaring a pandemic:

...we [the WHO] are deeply concerned both by the alarming levels of spread and severity, and by the alarming levels of inaction. We have therefore made the assessment that COVID-19 can be characterized as a pandemic. (WHO Director-General, 2020a: no page)

From this statement, it appeared, that for the WHO, to ‘characterize’ an event as a pandemic, there needed to be an ‘alarming level’ of spread, severity, and inaction. However, a dictionary of epidemiology defines pandemics differently as, “an epidemic occurring over a very wide area, crossing international boundaries, and usually affecting a large number of people” (Porta 2014 as quoted in Madhav et al. 2018 :315).¹² The definition of a pandemic does not include the virulence of the agent, i.e., morbidity (illness) and mortality (death) rates. Had the WHO applied this classical epidemiological definition, the current ‘event’ would have been ‘characterized’ a pandemic much earlier, i.e, by the 30 January, or, at the very least, by the end of February, two weeks prior to the WHO’s official declaration when it upgraded the ‘risk’ from high to very high at the global level (see Table 1).

The WHO’s first attempt to change the classical definition of a pandemic by linking ‘severity’ with geographical spread, was in 2009 in the wake of the H1N1 influenza pandemic.¹³ In 1999 the WHO had developed ‘pandemic phases’ as ‘tools’ for planning emergency preparedness and action which were later revised in 2005. Primarily developed for influenza epidemics, it had six phases, of which phase 5 and phase 6 are of relevance to the discussion here. Phase 5 was when ‘the virus [had] caused sustained community level outbreaks in two or more countries in one WHO region’ and phase 6 was when ‘[i]n addition to the criteria defined in Phase 5, the same virus [had] caused sustained community level outbreaks in at least one other country in another WHO region’ (World Health Organization, 2010/2009:8). In the H1N1 pandemic, the severity of the infection was very low but, because of the geographical spread, the pandemic status had been upgraded from Phase 5 to 6; at that time 42 countries were officially reporting H1N1 cases, and globally there were 11,168 laboratory confirmed cases and 86 deaths (World Health Organization, 2009). However, the member countries objected to the shift from Phase 5 to Phase 6 on the basis of geographical spread because they felt

¹² An epidemic is defined as “the occurrence in a community or region of cases of an illness . . . clearly in excess of normal expectancy” (Porta 2014 as quoted in Madhav et al. 2018: 315)

¹³ The H1N1 influenza pandemic originated in the US in January 2009 and spread across the US and the world and ended in August 2010. It was popularly known as ‘swine flu’, and though it originated in the US, was never termed the ‘American virus/flu’.

it conveyed a message that “You should be very afraid” (p. 5). As a medical-scientific body, the WHO could have then clarified, that the definition of pandemic and phasing of the severity/lethality of a specific agent are two different issues. But instead, to accommodate the sentiment of their member countries, on 22 May 2009, the WHO informed the press that it was considering changing the criteria of Phase 6 to include ‘a really substantial increase in risk of harm to people’ (p. 6) by conflating geographical spread and severity into one definition.

However, even at that time, the WHO’s proposal to change the definition of pandemic was questioned by some. For instance, Vincent Racaniello, a virologist wrote in his blog:

Apparently members of the United Nations don’t like the fact that WHO has been using ‘pandemic’ to describe the global spread of the new H1N1 influenza strains ... Apparently using the p-word gets everyone frightened as pandemic preparedness plans shift into gear... WHO redefining pandemic is absurd...WHO should leave textbook writing to others. To paraphrase Andre Lwoff, a pandemic is a pandemic. The word implies nothing about virulence – and has little to do with politics. (Racaniello, 2009).

Though the WHO had been formulating guidelines for pandemic preparedness for more than two decades, it had never formally defined the term pandemic (Doshi 2011).¹⁴ Referring to the WHO’s press briefing of May 2009, Morens et al. (2009) discussed at length the origin and its use by tracing the term’s historic evolution. They noted that, though there was a general consensus in public health for the classical definition, the confusion had risen in the process of translating ‘complex scientific ideas into publicly comprehensible language’ (Morens et al. 2009: 1010). They concluded that defining a pandemic as a large epidemic would make better sense but that the term should be reserved for infectious diseases only and not be extended to non-communicable diseases.

Abraham (2010:1307) remarks that, the distrust generated by the word pandemic with reference to the H1N1 influenza spread was due to the use of advocacy tools deployed to provoke governments and public to act which ended up fueling fear. This had arguably created a public image of pandemics being catastrophic events to be dealt at war footing. Doshi (2011), however, concluded that the pandemic label of ‘necessity’ must carry a notion of severity. Disagreeing with Doshi, Kelly (2011:540) restated that the classical definition includes nothing about population immunity, virology or disease severity and that including severity in the pandemic definition is a deliberate attempt by the WHO to ‘garner political attention and financial support for pandemic preparedness’. Further, Kelly averred, that in the case of H1N1 influenza, delaying the declaration of the pandemic several weeks after the criteria had already been met, was to link it to the announcement of the

¹⁴ This holds true for other authoritative scientific publications as well. For instance, the Institute of Medicine in its 2007 report of a workshop on *Ethical and Legal Considerations in Mitigating Pandemic Disease*, does not contain a definition of pandemic.

production of pandemic-specific vaccine because, had the classical pandemic definition been used, the vaccine may have been found to be unnecessary.

Despite the 2009 announcement to change definitions, the WHO retained the old rules in their updated 2009 publication. However, it seems that the intention to change the definition had remained unchanged because the WHO delayed the declaration of the Covid-19 as a pandemic by including ‘alarming’ severity as a ‘characteristic’ of a pandemic. Further, as noted earlier, not providing the criteria for grading the severity of risk, added to the arbitrariness and lack of transparency of the scientific body. Strangely, the WHO’s new definition of ‘pandemic’ has largely gone unremarked even by epidemiologists. In fact, a recent publication (Dawood et al. 2020) uncritically used 11 March 2020 as a cutoff point to divide timeline of the Covid-19 spread into ‘pre-pandemic’ and ‘post-pandemic’ periods.

The term pandemic gained further virulence in the media and, through it, in the public mind, when the Director-General stated in the same press conference of 11 March 2020 declaration:

Pandemic is not a word to use lightly or carelessly. It is a word that, if misused, can cause unreasonable fear, or unjustified acceptance that the fight is over, leading to unnecessary suffering and death. Describing the situation as a pandemic does not change WHO’s assessment of the threat posed by this virus. It doesn’t change what WHO is doing, and it doesn’t change what countries should do. (WHO Director-General, 2020a: no page).

This statement, apart from mystifying –why should the declaration lead to ‘unjustified acceptance that the fight is over’ when it was meant to galvanize action, generated worldwide panic, setting into motion reactions disproportionate to the threat that the ‘pandemic’ posed at that time. Green (2020:1035) speculated that, ‘[i]f the use of the term pandemic is delayed too long, [it]... could convey a message to the public that the authorities have lost control, generating irrational panic reactions’. It is tempting to conclude, that perhaps was the precise intention for delaying the declaration – to create a panic reaction. The irony is that the WHO’s declaration of a ‘Public Health Emergency of International Concern’ on 30 January 2020, which should have galvanized action, did not provoke much reaction from its member states.¹⁵

But most extraordinary was the Director-General’s statement in that press conference: ‘We have never before seen a pandemic sparked by a coronavirus. This is the first pandemic caused by a coronavirus’ (WHO Director-General, 2020a: no page). With this, the WHO inexplicably denied a historical and an epidemiological fact of two pandemics in the 21st century, the SARS pandemic of 2002-03 and the MERS (Middle East respiratory syndrome) pandemic of 2014, both due to a coronavirus; at its height, SARS (caused by SARS-CoV),

¹⁵ There were some notable exceptions. For instance, as early as 26 January 2020, the Kerala state in India set into motion a system of surveillance by issuing guidelines (Department of Health and Family Welfare, 2020).

was reported from 26 countries (World Health Organization no date-a)¹⁶ and MERS (caused by MERS-CoV) was reported from 27 countries (World Health Organization, no date- b). Between SARS and MERS, the current Covid-19 epidemic is more closely related to SARS both in terms of the probable origin and clinical picture. However, right from the beginning of the current epidemic when the new coronavirus disease had to be named, the WHO decided to not link it with SARS in the public mind.

¹⁶ Although the WHO refers to SARS global spread as an ‘epidemic’ (World Health Organization, no date-a), scientific literature views it, rightly, as a pandemic. See, for instance, Le-Duc and Barry (2004) and the review paper by Cherry and Krogstad (2004).

4 The ‘Novel’ coronavirus: what’s in a name?

The etiologic agent of the current pandemic was identified by the Chinese CDC (Center for Disease Control and Prevention) on 7 January, 2020, (National Health Commission of the People’s Republic of China 2020) as a ‘novel betacoronavirus, (*in the same family as SARS-CoV and MERS-CoV*)’ (emphasis added) (World Health Organization, 2020i).¹⁷ Here the term ‘novel’ is used in a relative sense; a novel virus is novel only till a new (novel) strain is identified. In the interim period between identification and the christening with an appropriate name, the new viral agent was named ‘2019 novel coronavirus’, to indicate that it belonged to the family of corona, was different from the previously identified ones and therefore new (novel) and had been ‘discovered’ as a disease agent in 2019.¹⁸ On 11 February, 2020, it was named ‘severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)’ as it is genetically closely related to the SARS virus (Coronaviridae Study Group of the International Committee on Taxonomy of Viruses, 2020). The same day, the WHO, entrusted with naming of diseases, named it Covid-19 (World Health Organization no date- c) which is an acronym of **corona virus disease of 2019**. According to the WHO, though it was closely linked to SARS, the decision to not name the disease as SARS-2, was because of the concern that ‘[f]rom a risk communication perspective, using the name of SARS can have unintended consequences in terms of creating unnecessary fear for some populations, especially in Asia which was worst affected by the SARS outbreak in 2003’ (World Health Organization, no date-c, no page). Even if this sentiment were to be taken in good faith, the disconnect created between the name of the virus and that of the disease, a practice at variance while naming SARS, allowed for the possibility of projecting Covid-19 as a completely new disease. This delinking allowed for the obfuscation of the familial relationship of the two coronaviral diseases and of the failure to take cognizance of epidemiological intelligence that had predicted a possibility of future novel

¹⁷ It is called coronavirus because of the crown-like spikes on their surface (Centers for Disease Control and Prevention, no date).

¹⁸ In 2015, the WHO, in close collaboration with the World Organisation for Animal Health (OIE) and the Food and Agriculture Organization (FAO), and in consultation with the International Classification of Diseases (ICD) developed a new criteria for naming new human infectious diseases (World Health Organization, 2015). This was in order to ‘minimize unnecessary negative impact of disease names on trade, travel, tourism or animal welfare, and avoid causing offence to any cultural, social, national, regional, professional or ethnic group’ (World Health Organization, 2015: 1) as in the past, names such as ‘swine-flu’, ‘Middle Eastern Respiratory Syndrome’ (MERS) had created a negative impact on the specific industry and community after which they had been named (Fakuda et al. 2015). However, notwithstanding the care that was taken to prevent stigmatization, Donald Trump had little compunction calling Covid-19 virus a ‘Chinese virus’ (Chiu, 2020). Incidentally, the first known case of the infamous ‘Spanish flu’ (1918) was reported not from Spain but from the military base at Kansas, USA. For an interesting account on why it was called ‘Spanish’ flu see Andrews (2020/2016).

coronavirus disease post-SARS pandemic (see El Zowalaty and Järhult, 2020; Hu et al. 2017; Wang et al.2006; Zhou et al. 2018).

SARS-CoV-2 (the Covid-19 virus) is the seventh coronavirus known to infect humans, and, of the seven, only three (SARS-CoV, MERS-CoV, and SARS-CoV-2) have caused serious outbreaks (Andersen et al. 2020). All the three are zoonoses¹⁹ that are transmitted from animals²⁰ but while in the former two, the link to animal reservoir has been confirmed, in SARS-CoV-2, the origin is still mired in controversy.²¹ Though the clinical picture is not very different, the three differ in terms of fatality rates and the basic reproduction number R_0 . Among the three, MERS had the highest case fatality rate (CFR)²² at 34.4% followed by SARS which had a CFR of 9.5% (Petrosillo et al. 2020) and the R_0 for MERS was less than 1 and that for SARS between 1.7-1.9. Hence, in MERS and SARS pandemics, both because the CFR was very high, and because of the low R_0 , it was possible to contain them within a short time. In contrast, community spread with Covid-19 virus takes place more easily and silently because of asymptomatic transmission (Gandhi et al. 2020) and hence, though less lethal in many populations, is more difficult to contain.²³

¹⁹ A zoonotic disease is defined as, ‘any disease or infection that is naturally transmissible from vertebrate or invertebrate animals to humans and vice-versa’ (Bueno-Mari et al. 2015:7).

²⁰ In SARS-CoV, bats (specifically horseshoe bats) were identified as a natural reservoir with probably palm civets as intermediate hosts (Wang et al. 2006). In MERS-CoV, the dromedary camels were identified as reservoir host with the possibility of bats as ‘original’ reservoir (Killerby et al. 2020). For an extensive discussion on coronavirus and animal reservoirs see Corman et al. (2018).

²¹ The competing theory to the wildlife origins (from bats passed through an intermediate animal, probably Malayan pangolin), is that the virus ‘escaped’ from the high secure Wuhan Institute of Virology that holds coronaviruses related to the SARS-CoV-2 virus (Cyranoski, 2020). But as Cyranoski notes, it could well take many years before the controversy can be resolved, if at all. In the earlier SARS outbreak of 2002, the virus link to bats could be confirmed only after 13 years. Moreover, as Cyranoski notes, given the geopolitical sensitivity, it could be near impossible for an independent investigation of the Wuhan Institute of Virology. Luc Montagnier, the French virologist and Nobel Laureate supported the ‘man-made’ theory of the virus, a claim discredited by other scientists (Bast, 2020). Andersen et al. (2020:450, 452) argue that it is ‘improbable’ that SARS-CoV-2 emerged through laboratory manipulation of a related SARS-CoV-like coronavirus, but do not rule out an ‘inadvertent laboratory release of SARS-CoV-2’. China came up with its own narrative. While in the initial period the ‘wet market’ link was accepted, on 12 March 2020, after the WHO declaration of pandemic, Chinese authorities claimed that the virus had been introduced into China by the US Army (Fook, 2020).

²² CFR is the proportion of people dying of those defined as cases and is expressed as a percentage.

²³ Petrosillo et al. (2020) point out that that the high virulence of MERS required hospitalization more frequently and therefore reduced the risk of community spread although it increased nosocomial (hospital acquired) infections. Covid-19 virus has also increased nosocomial infection rates.

5 Doing it with numbers

Data are not neutral and what is collected and how it is reported affect how a health problem is perceived and acted upon and moreover, ‘usually what is missing is of key significance’ (Krieger, 1992:421). From the daily SRs of the WHO, a key metric that is missing is CFR. This term appears for the first time in the report dated 19 February 2020 (World Health Organization, 2020j) and that is the only time it finds a mention in the WHO SRs. However, in the first week of August, the WHO released a ‘Scientific Brief’ (from now on ‘Brief’) entitled *Estimating mortality from Covid-19* (World Health Organization, 2020k). The ‘Brief’ was not targeted at epidemiologists and public health experts as it was too basic to improve their knowledge. It was

... intended to help countries estimate CFR and, if possible, IFR [infection fatality rate], as appropriately and accurately as possible, while accounting for possible biases in their estimation... In the COVID-19 pandemic, we have seen broad variations in naïve estimations of CFR that may be misleading. (emphasis added) (World Health Organization, 2020k:2-3)

The Covid-19 event is not unique as infectious diseases behave and the errors, complexities and biases in estimation described in the ‘Brief’ are unexceptional; every infectious disease investigation, whether by a ‘novel’ agent or an ‘old’ (known) one, will need to take into consideration these factors while estimating CFRs.²⁴ The intriguing question is, why did the WHO, with the resources and expertise within its command, not provide estimates of CFR if it had reservations about those that were being made available in the public domain by other agencies?²⁵ Even with imprecise data, the CFR, however ‘crude’ and ‘naïve’, would have provided a far better measure for assessing severity and for comparative purposes than absolute numbers of ‘cases’; all that was needed was to include the CFR as an additional column in the table of figures calculated from the absolute numbers of cases and deaths presented there.²⁶

²⁴ Already, early in the pandemic, in March 2020, the *Lancet Infectious Diseases* Journal published in its ‘correspondence’ section a series of letters on the nuances of CFR estimation in general and Covid-19, in particular (Baud and Nielsen-Saines et al., 2020; Baud and Qi et al., 2020; Kim and Goel, 2020; Lipsitch, 2020; Rajgor et al., 2020; Spychalski et al., 2020).

²⁵ There seems to be some exceptions. In late February the report of the WHO-China Joint Mission on Covid-19, estimated a crude CFR of 3.8%. In this report, the WHO used the acronym CFR for what they termed Crude fatality Ratio (World Health Organization, 2020l:12). Again, in the media briefing of 3 March 2020, the WHO’s Director-General mentioned that ‘[g]lobally, 3.4% of reported Covid-19 have died’ (WHO Director-General, 2020b).

²⁶ ‘Excess mortality’ is another critical measure to assess severity of the pandemic and Giattino et al. (undated) have stated that no international database is being published by international organizations that would enable estimating excess mortality due to Covid-19. Hospitalization rates, especially of severe symptomatic people is yet another.

Unfortunately, and perhaps not inexplicably, the WHO had decided to keep it simple. The data provided through the WHO's daily SRs dealt only in absolute numbers. And the absolute numbers were scary as they exponentially increased day by day creating a spectre of a global overwhelm.

Without providing CFRs in its SRs, the WHO's 'Brief', coming more than six months after the global spread of Covid-19, appears to have been provoked by the availability in the public domain data on CFRs. Though the methodology and database may have varied, a common thread that could be discerned in the different platforms was the vastly varying epidemiological picture of Covid-19, across countries and regions.²⁷ But what was perhaps discomfiting to the WHO was the 'widely variable estimates of CRF by country – from less than 0.1% to over 25%' (World Health Organization, 2020k:1).²⁸ Moreover, in the popular media, the wide varying trends across countries was beginning to create a counter-discourse to the one spear-headed by the WHO which depicted Covid-19 as a highly virulent disease.²⁹ It was perhaps to prevent the emergence of a feared 'complacency', and to provide a handle to governments (its audience), the WHO gave primacy to IFR and emphasized that 'a *complete picture* of the number of infections of, and deaths caused by, the disease must be known' for its estimation (emphasis added) (World Health Organization, 2020k:1), well knowing, of the difficulty in ascertaining a 'complete' picture in the middle of an epidemic/pandemic and the need for enormous resources to carry out serological tests at the community level. In any case, a CFR is generally considered adequate to understand patterns and plan strategies during an outbreak.

While CFR as an indicator of virulence did not get the attention it deserved, what occupied mediaspace were mathematical modellings, projections and the rising number of 'cases'. Five days after the WHO declared a 'pandemic', the *Imperial College Covid-19 Response Team*, London, (from now on the 'Imperial Team') published their assessment of the impact of 'non-pharmaceutical interventions' on mortality and health care demands for the UK and the USA (Ferguson et al. 2020).³⁰ Undeterred by the less than precise data that were available for their model at that point of time, which the WHO

²⁷ Worldometer is one such public platform operated 'by a small and independent digital media company based in the United States' (<https://www.worldometers.info/about/>). It has been providing data since the beginning of the pandemic. Though the countries are listed on the basis of the 'number of cases' which is a biased presentation of the situation, the website is useful to understand the global situation. 'Our World in Data' is another a collaborative effort between researchers at the University of Oxford, and a non-profit organization *Global Change Data Lab* (<https://ourworldindata.org/about>).

²⁸ The WHO provides no citation for this figure. I have not come across 25% CFR with Covid-19 in literature search.

²⁹ See for instance Oltermann (2020) and The Print Team (2020).

³⁰ The *Imperial College Covid-19 Response Team* comprised the WHO Collaborating Centre for Infectious Disease Modelling, MRC Centre for Global Infectious Disease Analysis, Abdul Latif Jameel Institute for Disease and Emergency Analytics, and the Imperial College of London (Ferguson et al., 2020).

had said was too crude even to assess CFRs, the report began with an unwarranted premise:

The last time the world responded to a global emerging disease epidemic of the scale of the current COVID-19 pandemic with no access to vaccines was the 1918-19 H1N1 influenza pandemic. In that pandemic, some communities, notably in the United States (US), responded with a variety of non-pharmaceutical interventions (NPIs) - measures intended to reduce transmission by reducing contact rates in the general population. (Ferguson et al., 2020:3)

First, it was disingenuous to compare the Covid-19 situation which, at the time of modeling, had recorded globally only 6470 deaths (Ferguson et al. 2020), to the 1918-19 influenza pandemic which had killed at least 50 million worldwide (CDC no date). Aside from this, comparing the two was untenable because the unique feature of the 1918-19 pandemic was that mortality was high in *healthy* people, particularly in the 20-40 year age group (CDC no date), whereas in the Covid-19 situation the mortality is concentrated in the relatively immuno-compromised older age groups with or without co-morbid conditions. Secondly, it needed further ingenuity to flag the issue of a vaccine at this early stage of the Covid-19 pandemic when there was little evidence to show how it would evolve across the world and whether there would be a need for a vaccine at all. The Imperial team then announced to the world that their simulation model had predicted approximately 510,000 deaths for the UK and 2.2 million deaths for the US, in an ‘unmitigated epidemic’, ‘not accounting for the potential negative effects of health systems being overwhelmed on mortality’ (Ferguson et al. 2020:7).³¹ The next day the *New York Times* remarked that the impact of the study, ‘wasn’t so much the numbers themselves, frightening though they were, as who reported them: Imperial College London’ (Landler and Castle, 2020). Such reverence to the epistemic authority of the ‘Imperial team’ meant that a non-peer reviewed report, published on the website of the Imperial College London (member of the modeling team), was accepted even by the scientific community without much demur.³² The Imperial Team’s projection of the probable mortality, though calculated only for the UK and US, was embraced by other countries as a likely scenario in

³¹ In less than two weeks, Ferguson, the lead epidemiologist of the Imperial team Study revised the estimate for UK from 510,000 deaths to less than 20,000 deaths, which he later denied (*Outlook* 2020). In April 2020, Ferguson revised the estimate to 7,000 to 20,000 deaths allegedly because of the measure taken by the UK government (Reuters Staff 2020).

³² For instance, Devi Sridhar, director of the Global Health Governance program at Edinburgh University was quoted as saying ‘ “[a] lot of it is not what they say, but who says it ... Neil Ferguson has a huge amount of influence” ’ (Landler and Castle, 2020). There were some counters by other scholars but mostly in ‘grey’ literature (see for instance, Dayaratna, 2020; Sagar, 2020; Shen et al. 2020). Due to increasing criticism on the reproducibility of the Imperial Team model, *Nature* published in their News column that the model had been successfully ‘code tested’ which, though, ‘isn’t a review of the scientific accuracy of the simulation, ... dispels some misapprehensions about the code, and shows that others can repeat the original findings’ (Chawla, 2020).

theirs too. The report thus became the foundation for the dominant global strategy for dealing with the Covid-19 pandemic/epidemic.³³

The Imperial Team's report, modeled on an earlier 'microsimulation' with the H1N1 *influenza pandemic of 2005* by its lead author Neil Ferguson, was based on several questionable assumptions. The data that went into the construction of the model were from the Chinese outbreak and aside from the fact that it was at a very early stage of a still evolving outbreak, the data was applied uncritically to other populations (UK and USA) without reference to contextual factors. Based on the Wuhan data, the model assumed a R_0 of 2.4 with values between 2.0 and 2.6.³⁴ It is not clear why the model was not developed as well for a lower R_0 in the range, as an earlier report from Wuhan had estimated R_0 to be from 1.4 to 2.5 (World Health Organization, 2020b). Further, R_0 itself is a product of mathematical modeling and not a fixed entity for a pathogen and this variability was not incorporated into the model. In this model, as also in many subsequent models by others, there was one unstated assumption: that, as a 'novel' pathogen, all populations were equally immunologically naïve and were therefore universally vulnerable. However, as later research showed, the R_0 varied across populations; for instance, the R_0 for India was estimated at a much lower level of 1.37 with a tight 95% Confidence Interval (1.375, 1.384) (Marimuthu et al., 2020).³⁵ Importantly, the Imperial Team failed to include in their model, testing and contact tracing, which had been mandated by the WHO as vital elements in the control strategy (Adam, 2020; Shen et al.2020).³⁶

³³ Notable exceptions to complete lockdown were Japan, Sweden, South Korea; Netherlands took a softer option.

³⁴ Further, in the Imperial college model, the age-stratified proportion of patients requiring hospitalization and the IFR, both critical variables, were also taken from 'a subset of cases from China' presented by Verity et al. (2020a) in a non-peer reviewed publication. Verity et al. (2020a) study was later published in a peer reviewed journal (2020b). One citation (Yang et al., 2020a) published on 11 February 2020, which formed the basis for an important Table No.3 in Verity et al. (2020a; 2020b) had been retracted by the authors on 21 February 2020 (see Yang et al., 2020b).. When the retraction was brought to the notice to the co-corresponding author of Verity et al. by retractionwatch.com, the author Azra Ghani, admitted to being unaware of the retraction and stated that they would update their peer reviewed publication. It has not been done yet. Both Yang et al. (2020a; 2020b) have been given the same doi and therefore the paper published on 11 February 2020 (Yang et al. 2020a) is not available in the public domain (the author had downloaded a copy before it was taken off the net).

³⁵ In the context of India, one hotly debated issue is whether the BCG vaccination, a mandatory vaccine give at birth in India, has a protective effect against Covid-19 (Global Alliance for Vaccine Initiative, 2020; IANS 2020).

³⁶ The WHO did not see it fit to release a 'Scientific Brief' on the pros and cons of modelling infectious diseases, which would have been useful for epidemiologists as well.

6 How to incubate a pandemic: travel abroad and seed along

On 23 March 2020, a week after the Imperial study was published, another modeling study (Lourenço et al. 2020), later known as the ‘Oxford study’, also not peer-reviewed, was published.³⁷ The authors presented some startling conclusions. Their results suggested that ‘the ongoing epidemics in the UK and Italy started at least a month before the first reported death and [had] already led to the accumulation of significant levels of herd immunity in both countries’ (Lourenço et al. 2020:1).

The spread of a novel pathogenic infectious agent eliciting protective immunity is typically characterised by three distinct phases: (I) an initial phase of slow accumulation of new infections (often undetectable), (II) a second phase of rapid growth in cases of infection, disease and death, and (III) an eventual slow down of transmission due to the depletion of susceptible individuals, typically leading to the termination of the (first) epidemic wave. Before the implementation of control measures (e.g. social distancing, travel bans, etc) and under the assumption that infection elicits protective immunity, epidemiological theory indicates that the ongoing epidemic of SARS-CoV-2 will conform to this pattern. (Lourenço et al. 2020:1)

Given this, the authors estimated that by 19 March, ‘approximately 36% ($R_0 = 2.25$) and 40% ($R_0 = 2.75$) of the [UK] population would have already been exposed to SARS-CoV-2’ and that approximately 68% in UK would have been ‘infected’ by then (Lourenço et al. 2020:3). Additionally, the two critical assumptions in the Oxford study that were absent from the Imperial study were: one, that substantial transmission would have taken place before the first death due to Covid-19 was recorded and, two, that only a fraction of the population (0.1% to 1%) was at risk of serious disease (mostly comprising the older age groups and those with co-morbid conditions). The Oxford team was also transparent about the robustness of their data by providing a 95% confidence interval which the Imperial Team had not.

Infectious disease epidemiology tells us that the Oxford study scenario was better grounded in science because, there was more than a possibility that by the time the first ‘case’ was noticed (hospitalized) and notified, community transmission would have already begun. However, the community transmission would have remained silent/un-noticed and un-quantified because of a likelihood of them being asymptomatic ‘cases’ (infected persons showing no symptoms of the disease), or with mild ‘flu-like’ symptoms requiring out-patient care, if at all.³⁸ In Wuhan city too, it was estimated that the virus was probably in circulation from August 2019, five months before the *hospitalized* cases were noticed as a ‘cluster’ (Nsoesie et al. 2020). However, more disbelief was expressed about the results of the Oxford study than that from the Imperial Team’s, even though the several limitations pointed out about the

³⁷ While both the Imperial Team study and the Oxford study are non-peer reviewed, this shortcoming was projected as an important limitation of the latter, and not to the former.

³⁸ This was the time of the ‘flu’ season as well.

Oxford study by critics applied equally to the Imperial study; they could be considered as good or as bad as the other.³⁹ Finally, between the two, it was the Imperial Team's study that became the blueprint for the strategy to tackle Covid-19 not only for the UK and USA but globally as well.

Covid-19 virus spread across the world primarily by air travel. The outbreak in Wuhan city was during the holiday season and with the impending Chinese New Year, heavy air traffic was expected to and from China. As early as the second week of January 2020, the *Journal of Travel Medicine* published an article highlighting the threat of an international spread of the novel coronavirus disease via air travel (Bogoch et al. 2020). Using the 2018 travel data from the International Air Transport Association (IATA) to quantify passenger volumes originating directly and indirectly from Wuhan, and Infectious Disease Vulnerability Index scores for countries receiving significant numbers of travelers from Wuhan, the authors concluded that 'major Asian hubs are the most probable sites of exportation, should this epidemic continue', but warned that the situation in the 'northern hemisphere' may be complicated by high levels of 'influenza-like illnesses at this time of the year' (p.2).⁴⁰ In the US, estimates of inflow ranged from 'at least' 430,000 people arriving by direct flights from China before the travel advisory was issued (Eder et al.2020) to 759,493 arriving during the critical period in December, January and February (Thomas et al. 2020).⁴¹ A news item on 24 January 2020, pointed out that Italy was a preferred destination for Chinese tourists with the Lombardy, Lazio, Tuscany and Veneto as favoured regions; in 2019, Chinese visitors had spent over 650 million euros, which was almost 40 percent higher than the previous year indicating burgeoning tourism (Xinhua, 2020). All this could only mean that, probably, by mid-January 2020, long before a 'case' was confirmed, the virus was in circulation in several countries including those in the Global North, without the infected persons being diagnosed as a 'case'. Yet, even as late as 27 February, the WHO and UNWTO (2020) issued a joint statement soft pedaling on the role of tourism and cautioning against interfering with international travel which would have a 'negative repercussions on the tourism sector'. The Imperial Team too had acknowledged the possibility of community transmission in its modeling when it noted that:

Infection was assumed to be seeded in each country [UK and US] at an exponentially growing rate (with a doubling time of 5 days) *from early January 2020*, with the rate of seeding being calibrated to give local epidemics which reproduced the observed cumulative number of deaths in GB or the US seen by 14th March 2020. (emphasis added) (Ferguson et al., 2020:4)

³⁹ See Ye (2020) for an analysis of the Oxford study.

⁴⁰ The IDVI score estimates a country's capacity to prepare for and manage infectious disease threats (Bogoch, 2020).

⁴¹ Sen (2020) reports that China curtailed domestic flights but assured the world all was well and opposed travel ban or advisory by other countries.

7 Epidemics as bio-political testing grounds

The Imperial Team, terming their proposed social interventions as ‘non-pharmaceutical’ interventions (NPI), recommended two ‘fundamental strategies’, mitigation or suppression, as control measures. However, in the next breath as it were, they made it clear that there was really no choice because, ‘[f]or countries able to achieve it ... suppression [is] the preferred policy option [because with mitigation, it] would still likely result in hundreds of thousands of deaths and health systems (most notably intensive care units) being overwhelmed many times over’ (Ferguson et al., 2020:1).^{42 43}

The Imperial Team then spelt out what ‘suppression’ entailed: ‘it would *‘minimally* require a combination of social distancing of the *entire population*, home isolation of cases and household quarantine of their family members... supplemented by school and university closures... until a vaccine becomes available (potentially 18 months or more)’ (emphasis added) (Ferguson et al., 2020: 1 and 2). When presented with this grim scenario of TINA (there is no alternative) few countries could remain unfazed and, whether they were ‘able to achieve it or not’, suppression became the strategy of choice; and in this process, some countries, being more loyal than the king, stretched the mandate to the maximum. In effect, a complete ‘lockdown’, in the end of March 2020, by when the virus had well ‘seeded’ itself across many parts of the world, was of questionable value. The Imperial team had admitted to as much when in an earlier report dated 21 February, they concluded that ‘more than half of COVID-19 cases exported from mainland China have remained undetected worldwide, potentially leaving sources of human-to-human transmission unchecked’ (Bhatia et al., 2020).

As country after country went into a ‘lockdown’ incarcerating its ‘populations’, wherever they were, behind walls that had suddenly sprung, invisibly visible, who else to turn to but Foucault.

It looks like a biopolitical dream: governments, advised by physicians, impose pandemic dictatorship on entire populations. Getting rid of all democratic obstacles under the pretext of "health," even "survival," they are finally able to govern the population as they have, more or less openly, always done in modernity: as pure "biomass," as "bare life" to be exploited. (Sarasin, 2020).

⁴² Even as early as 21 March 2020, Italian doctors called for mitigation strategy urging community-centered care to replace patient-centered care (Nacoti et al. 2020). Moreover, virus and epidemics may cross boundaries but within ‘boundaries’ they end up ‘behaving’ differently, epidemiologically speaking, as can be seen from the low CFR in Japan compared with Italy, despite similar demographics of an ageing population; Italy went for lockdown whereas Japan opted for mitigation.

⁴³ This is not the first-time numbers have been used to create panic. See Carl Caduff’s *Pandemic Perhaps* (2015), a must-read book on the politics of pandemics and fear mongering.

Referring to the several Foucauldian scholars who, along the lines of the above quote, have sought to explain the pandemic as the unfolding of authoritarian biopolitics, Sarasin (2020) argues that the concepts of biopower and biopolitics may not be best suited for understanding the global response to the Covid-19 pandemic. Instead, he finds Foucault's interpretation of the public health responses to three diseases – leprosy, plague and smallpox – as models for three distinct forms of governance, more appropriate.

A certain territory was marked out and closed off ... The ... town... was divided up into districts, the districts were divided into quarters, and then the streets within these quarters were isolated. In each street there were overseers, in each quarter inspectors, in each district someone in charge of the district, ... There is, then, an analysis of the territory into its smallest elements and across this territory the organization of a power that is continuous in two senses. ... a power that was continuous not only in this pyramidal, hierarchical structure, but also in its exercise, since surveillance had to be exercised uninterruptedly... individuals were sorted into those who were ill and those who were not ... (Foucault, 2003 :45-46)

This 'spatial partitioning and control (quadrillage)' during the plague epidemics in medieval Europe became the model of political control in the eighteenth century, a 'political dream of an exhaustive, unobstructed power that is completely transparent to its object and exercised to the full' (Foucault 2003:44,47). This disciplinary form replaced an earlier model based on leprosy which segregated and excluded the sick by casting them out, withholding care. Smallpox, with the possibility of control through inoculation, gave rise to a 'liberal governmentality' as too much discipline of individuals would have undermined their freedom, which was necessary for the system to function (Sarasin, 2020:5). Sarasin points out that in the response to Covid-19 all three models can be perceived: the complete lockdown follows the plague model; the reliance on voluntary 'social distancing', and I would add, searching for the holy grail of a vaccine,⁴⁴ reflects the smallpox model; and abandoning old people to die in nursing homes unattended fits the leprosy model.⁴⁵ I would add that the leprosy model was well illustrated in the case of the Diamond

⁴⁴ By the time a vaccine is available sometime in 2021-22, there may already be adequate levels of herd immunity. Moreover, just as in the case of flu vaccines whose composition need to be reviewed and updated each year as the virus evolves (CDC, 2019), the Covid-19 vaccine whenever available will also have to be reviewed and updated each year.

⁴⁵ Both the US president Donald Trump and Texas Lt. Gov. Dan Patrick were reported to have said that old people should sacrifice their lives to save the economy (Wexler, 2020).

Princess cruise ship ⁴⁶ and continues to be exhibited in the way the frontline health-care workers and other essential services maintenance personnel have been expected to function without adequate personal protection (Amnesty International 2020).⁴⁷

However, while the responses to Covid-19 exemplify the different power techniques deployed in the three disease models, they do not tell us the whys of it in the current Covid-19 situation. Why was the ‘plague model’, based as it was on the questionable science of the Imperial College recommendation, adopted as the dominant model? Why did the global elite find this ‘model’ politically expedient despite its potentially devastating impact on the global economy, on the circulation of capital? That the pandemic provides further opportunities for capital accumulation (pharmaceuticals including vaccine development and manufacture, medical equipment, communication and surveillance technologies)⁴⁸ is only one part of the story because the gains from these would be offset by the negative impact on several other sectors, aviation and tourism, for instance. That the lockdown provided a justification for the exercise of ‘naked power’ (Alon et al. 2020; Youngs and Panchulidze, 2020), is also only a part of the story as in any case, globally, surveillance was beginning to be normalized in the context of the perceived, growing threat to global security.

Even as a purely public health measure the lockdown should have been considered ill-advised because it condemned all other needy populations to probable death by withdrawing care. For instance, it has been estimated that the negative consequences of the exclusive focus on Covid-19 could be a rise in child and maternal mortality (Fore 2020), an escalation in tuberculosis incidence and deaths (Bhargava and Shewade, 2020), increase in the number of avoidable cancer deaths (Maringe et al. 2020), rising world hunger (FAO et al. 2020) and has led to a disruption of HIV, STI and Hepatitis services (World Health Organization, 2020m) and routine childhood immunization (World

⁴⁶ On 3 February, the Diamond Princess with 3,711 passengers and crew members on board was quarantined immediately after its arrival in Japanese waters because a person who had disembarked on 1 January was found to be covid-19 positive. As an act of extreme cruelty, the quarantine was like a potential death sentence for the passengers and crew because at that time the lethality of the virus was still unknown and they were allowed to disembark only at the end of the quarantine period. Among the exposed persons, 712 (19.2%) tested positive and 53% were symptomatic; of the symptomatics, 9.7% required intensive care and 9 died (Moriarty, 2020). The ‘closed’ environment of the ship was perceived as a site of knowledge production, as an ‘ideal place to see how coronavirus behaves’ (Mallapaty, 2020).

⁴⁷ Racial disparities in deaths due to Covid-19 have also been recorded. In the US, deaths among Black people was 3.6 times, indigenous people 3.4 times and Latinos 3.2 times higher than the white population (APM Research Lab, 2020).

⁴⁸ The US government has allocated more than \$9 billion (Weintraub and Weise, 2020) and the EU pledged another \$ 8 billion (Stevis-Gridneff and Jakes, 2020) for Covid-19 vaccine development.

Health Organization, 2020n) among others.^{49 50} It is remarkable that these not unexpected consequences did not form part of the Imperial Team's estimation of deaths *due* to 'suppression' strategy.

The inequitable impact of the lockdown, particularly on those who live off their physical labour and form part of the informal economy, has also been pointed out (Cash and Patel, 2020; ILO, 2020). However, this marginalized population was in any case increasingly deemed dispensable to the national and global economy, and Covid-19 only helped in furthering the conditions for 'letting them die' in the Foucauldian biopolitical sense. But the lockdown strategy brought another 'population' under the biopolitical project of 'letting die'— the 'consuming classes'—that have hitherto been nurtured and 'made to live' in order to feed the capitalist economy. The World Bank (2020a:1) reports the emergence of a class of 'new poor due to Covid-19 pandemic', defined as 'those who were expected to be non-poor in 2020 prior to the COVID-19 outbreak but are now expected to be poor in 2020'. Sumner et al. (2020: no page) estimate that there will be 400 million 'new poor' in developing countries with the likelihood of global poverty shifting towards 'middle income countries and South Asia and East Asia'.⁵¹ While previously, any move to curtail this population's contribution towards the economy would have well-nigh been considered unthinkable, the Covid-19 lockdown forced a drastic change in general consumer 'behaviour' due to constrained budgets and future uncertainties (Arora et al. 2020; Deloitte, undated; Gössling et al. 2020; Sheth, 2020; Singh, 2020). The World Bank (2020b:3) has assessed the consequences of the pandemic strategies and expects that most countries would be plunged into recession in 2020 'with per capita income contracting ... globally since 1870'.

Policy-makers face formidable challenges as they seek to contain the devastating health, macroeconomic, and social effects of the pandemic. During the last global recession, in 2009, many EMDEs [Emerging Markets and Developing Economies] were able to implement large-scale fiscal and monetary responses. Today, however, many EMDEs are less prepared to weather a global downturn and must simultaneously grapple with a severe public health crisis with heavy human costs. (World Bank, 2020b: 6)

⁴⁹ In addition, there would be an increased morbidity and mortality among patients with long term illnesses such as diabetes, and cardiovascular diseases due to lack of care. On the other hand, the lockdown may have had a positive effect on pollution related morbidities and mortalities.

⁵⁰ When India went into lockdown on 23 March 2020, Jayaprakash Muliyil, one of India's foremost epidemiologists, spoke against a complete lockdown because by then, according to him, community transmission was already underway and expected that 55% of the population would be infected in the first wave (Saikia, 2020).

⁵¹ As one author put it, '[t]oday, a pandemic threatens the middle, a disease that hits above the belt, unlike cholera and malaria that struck the unwashed and unsheltered. Covid-19 doesn't distinguish between classes, but the aftermath will certainly distinguish itself by hurting this mass in the middle' (Singh, 2020). The 'digital divide' is only one of the many ways the lockdown is acting as a filter between those who will live and those who will die among the non-poor (Financial Express, 2020; United Nations, 2020; Watts 2020).

The ‘heavy human costs’ is not a matter of detail but very much part of the need to prune populations to suit the transforming economy. With the shrinking role of the consuming classes in buttressing growth and their diminished participation in the economy, would it then mean a death knell to capitalism? Apparently not. Notwithstanding the metaphorical wringing of hands, one does not need to take recourse to conspiracy theories⁵² to understand that global economy is being restructured, violently and definitively, with Covid-19 ‘pandemic’ providing an uncontested justification. The reason is not far to seek. The virus, coming as it did, at the end of a year when there was already evidence that the world economy was heading for a serious recession in 2020 (UNCTAD, 2019), and mobilization across the world against climate change was reaching a crescendo, provided an unlooked (?) for opportunity to test the waters for an experiment into the next phase of capitalism—incorporating ‘degrowth’, not as an anti-capitalist measure, but to transmute it in its own image (Feffer, 2020; Roulet and Bothello, 2020; Stiglitz, 2019).⁵³

Following World War-I, when a typhus pandemic in Eastern Europe was devastating the Russian troops, Lenin famously remarked ‘*[e]ither the lice will defeat socialism, or socialism will defeat the lice!*’ (italics as in original) (Lenin, 2012/1919:228). In the context of Covid-19 pandemic however, the virus and capitalism have shown a remarkable propensity to nurture and cohabit as intimate bedfellows.⁵⁴

Foucault (1980 :58) in one of his interviews, remarked ‘[o]ne needs to study what kind of body ... society needs’, to understand, ‘what mode of investment of the body is necessary and adequate for the functioning of a capitalist society like ours’. To answer the question, what kind of ‘body’ do the global elite foresee for the future, Covid-19 pandemic has demonstrated it unequivocally: the future biopolitical project demands an immobile, docile, segmented, risk averse (stay safe), individualized, isolated (stay home), ‘socially’ distanced (don’t mingle; don’t organize; to care is to kill), surveilled, biomass that will, sooner or later, attrite as they will be ‘let to die’ to suit the new global

⁵² The Covid-19 pandemic ‘has fuelled more than 2,000 rumors and conspiracy theories’ (Rettner 2020). My own favourite is the one that links the Covid-19 pandemic with 5G mobile telephony technology (See Bruns et al. 2020 for an interesting discussion on this conspiracy theory). A recent, more devastating and authoritative claim that Covid-19 is a planned pandemic has allegedly been put forward by Physicians groups in Germany and Spain (Fetzer 2020).

⁵³ Some typologies being brought into play are, stakeholder capitalism, inclusive capitalism, responsible capitalism, sustainable capitalism, and green capitalism. On the need to take into account the interests of stake holders by investment companies, Anne Richards, CEO, Fidelity International, remarked ‘[t]oday, we call it sustainable capitalism. You might even see it referred to as stakeholder capitalism or ethical capitalism or ESG [environmental, social and governance]. But, at some point in the near future, it will just be called capitalism’ (Richards, 2020:2).

⁵⁴ Mckinsey is already outlining the new digital ‘normal’ (Accessed 26.9.2020 <https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/how-six-companies-are-using-technology-and-data-to-transform-themselves>).

biopolitical need for a non-consuming, automated, artificially intelligenced lives to mitigate the unprecedented peril faced by our biosphere which threatens the existence of the power elite.^{55 56} The smallpox model of liberal governmentality with ‘too much freedom’ cannot serve the system any longer.

⁵⁵ Wedel (2017) terms them as ‘influence elites’.

⁵⁶ Even with the world lockdown, whether the clock has been reset for climate change is debatable but this is a narrative that is being promoted aggressively, because within a week into lockdown, the media, print and social, was abounding with feel-good stories of wildlife ‘moving in’ (see for instance, BBC News, 2020b). However, the *National Geographic* has debunked much of it as fake news put out to give ‘false hope – and viral fame’ (Daly, 2020).

8 Concluding remarks

As of 1 December 2020, when this paper was finalized, Covid-19 cases were reported from 218 Countries and Territories around the world with a total of 63,729,188 confirmed cases and a death toll of 1,476,909 deaths amounting to a global CFR of 2.3 % (Worldometer, 2020). Disaggregated rates showed wide disparities among countries; for instance, India ranked second highest in the world in terms of confirmed cases (9,463,254) whereas its CFR was only 1.45% (death toll 137,659). In contrast, UK with its relatively low number of confirmed cases (1,629,657) and deaths (58,448) had a higher CFR of 3.58%.⁵⁷ However, both the WHO (and the media it feeds) have focused on the number of ‘cases’ as an indication of the virus ‘lethality’ which has helped deflect attention from the fact that, for the ‘first time in the post-war history of epidemics’, there is a reversal with the world’s richest countries having had to face the major brunt of the pandemic (Cash and Patel, 2020:1687) and the usual suspects, countries from ‘the third world’, have turned out to be surprisingly relatively ‘immune’. Yet by imposing the ‘suppression’ strategy of lockdown on countries in the Global south, what has been ensured is not that people *may* die, but that ‘populations’ *will* die, and these deaths will not necessarily be due to the virus.

On 7 September, the WHO’s Director General warned: ‘This will not be the last pandemic. History teaches us that outbreaks and pandemics are a fact of life. But when the next pandemic comes, the world must be ready – more ready than it was this time’ (WHO Director-General, 2020c). This warning was sounded in 2006 too after the SARS pandemic when it was pointed out that viruses, especially of the Covid variety ‘possess more risk than other pathogens for disease emergence in human and domestic mammals because of their higher mutation rates’ (Wang et al. 2006:1839). Barely ten months down the line after Covid-19 emerged as a disease of political significance, its origin, source and spread, rooted in the process of capital accumulation and the ensuing destruction of the global ecosystem that makes zoonoses a recurring imminent threat (Chuang.cn, 2020; Fidalgo, 2020), seem to have been all but forgotten as the next microbial invasion — Covid-XX – waits in the wings.⁵⁸

⁵⁷ On 26 September, the CFR in UK was 9.9%.

⁵⁸ Pun unintended.

suspended in time we wait

*suspended in time
we wait
nerveless
witless
complicit
governmentalized
subjugated
we wait
home's our prison
herd we are
but herd we can-not
your breath my death
covid or cancer
take your pick
we wait
segmented
caged
carcerated
panopticalised
for shackles to fall
locked with own hands*

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