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Note of Editor-in-Chief

This is the first Special issue of the journal Culture e Studi del Sociale-CuSSoc. The idea behind the special issue comes from this consideration: around the world, individuals are facing a critical moment, the COVID-19 pandemic and its consequences require some reflections on many topics, often forgotten by scholars. This is the reason why many Italian and foreign scholars have been invited to give their contribution. Furthermore, now more than ever, it is crucial to share knowledge coming from multiple disciplines and that's why it was decided to write an entire issue in English.

For scientific and intellectual correctness, the contents of single articles refer to the situation as in mid-May 2020. It is necessary to clarify that because this Special issue was published when many countries were starting to reduce their emergency measures to cope with the pandemic.

The Governance of Resilience. How the Health Systems Have Coped with The Covid-19 Pandemic

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Abstract
After considering the reasons why pandemics are destined to remain also in the near future in our late industrial societies, a conceptual framework for the analysis of governance of resilience of health systems is described and then applied in details following its main four dimensions to the ways various health systems have coped with the pandemic of COVID-19, with specific reference to the Italian National Health Service. In the conclusions, an overall assessment of the ways in which the health systems have responded to the pandemic of COVID-19 is traced on the basis of three different levels of resilience governance and their implications.

Key word: Pandemic, Governance, Resilience, Health systems, COVID-19.

1. Back to the future: why societies will continue to cope with pandemics

In recent decades, epidemiologists and medical historians have explained to us that what Omran (1971) called the 'epidemiological transition' - or the passage from the prevalence of infectious and acute pathologies that still characterized the era before to that of chronic-degenerative (oncological, cardiovascular) pathologies - had already been accomplished for late industrial societies, starting from about the middle of the last century. In reality, Omran identifies three phases of this supposed long transition: the 'age of the great plagues and hunger', which from the Middle Age continues until the threshold of the modern era; the 'age of declining epidemics' that spanned the first two industrial revolutions during the nineteenth century until the two world wars; and, precisely, the 'age of degenerative and man-made diseases', which would coincide with the contemporary era. Subsequently, two other epidemiologists (Olshansky and Ault, 1986) believed that, by virtue of the progressive decline in mortality rates due to chronic-degenerative diseases in late industrial countries, it was appropriate to introduce 'the fourth stage of the epidemiological transition: the age of deferred degenerative diseases'.

Only now, in the midst of current COVID-19 pandemic, do we realize that we have deluded ourselves with the belief that 'the age of the great plagues' was only a reminder of a more or less distant past: in reality, if we observe the historical trend of the great pandemics of plague, cholera, smallpox, typhus, TB, flu, etc. (Jones, 2020), we discover that they repeat cyclically due mostly to zoonotic viruses, that is, originating from an interspecies contagion from animals to humans. Not only that: the frequency and virulence with which pandemics occurred in the course of the twentieth century and to date appear significantly increased compared to past centuries, from the terrible 'Spanish' of 1918 with 100 million deaths to the 'Asian' of 1957 which killed over a million people mainly in China, to the 'Hong

Kong flu' which in 1968-69 made more than 250 million infected with almost a million deaths worldwide, at H1N1, called 'swine flu', which in 2009 caused up to 400,000 thousand deaths.

That pandemics are therefore destined to remain also in the near future is confirmed by the new pandemic of COVID-19, which has occurred only a little over a decade from the previous one with such virulence that, as we write, it produced something like 4,962,707 cases of infection confirmed worldwide since the outbreak and 326,459 deaths (official figures, probably underestimated)[1]. Among the factors that can explain this persistence, those of environmental nature have been increasingly recognized as being among the most important ones. Epidemics and pandemics[2] are an expression of environmental stress and an alteration of the balance between the human species and its living environment. Viruses and bacteria are part of the natural environment as well as mankind; in our organism at least 10 million billions of foreign microorganisms coexist, which participated in our evolution, helping to shape our immune system; they are part of our genetic heritage and of our life of relationship with the outside world.

Several studies have recently been published which have related the spread of coronavirus to exposure to air pollution and, in particular, to emissions of particulates, or climate-altering gases (Setti *et al*., 2020; Xiao Wu *et al*. 2020). Every year, at the global level, the atmospheric particulate alone is responsible for about 7 million deaths; in Italy the premature mortality attributable to particulate matter (PM2.5), ozone (O3) and nitrogen dioxide (NO2) has been estimated at more than 80,000 cases/year, without considering the effects of all the other pollutants (European Environment Agency, 2015).

The causal link is also known between air pollution and many diseases that are the collateral cause of severity in Covid-19 (cardiac, vascular, respiratory diseases); the depressing action of the immune system and of normal development of respiratory function in children by air pollution (European Respiratory Society, 2010); the increase of risk of respiratory diseases and acute infections of the lower respiratory tract particularly in vulnerable individuals, such as the elderly and children. Another feature of air pollution, and in particular of peaks in pollution levels, is the phenomenon known as the 'harvesting effect': that of causing an increase in premature deaths of the elderly population and of other subgroups of the most vulnerable population as affected by one or more chronic diseases, the same population most affected by COVID-19 (International Agency for Research on Cancer, 2016).

Climate instability and, in particular, extreme climatic events (extreme heat and cold waves, floods, hurricanes, fires) can also have serious impacts in potentially more susceptible populations such as the elderly, causing mortality by cardiovascular, cerebrovascular and respiratory diseases, asthma and COPD, ischemic heart disease, arrhythmias, and arterial thrombosis (IPCC, 2013). Particularly, climate change affects the geographical spread of vectors (latitude and altitude), the seasonality (risk periods) and the incidence of disease; they affect animal reservoirs of influenza viruses and bird migration patterns, spreading viruses to new locations and to a wider range of bird species (Wu *et al.*, 2016). Greater opportunities for pathogens to spread across the oceans arise also by the continuous melting of sea ice. Climate change can also cause or strengthen safety problems during all stages of

[1] Source: WHO, *Health Emergency Dashboard*, May 22, 2020 (https://covid19.who.int/).

[2] The difference between epidemic and pandemic consists in the fact that the second has a greater degree of diffusion (intercontinental) and severity in terms of morbidity and mortality compared to the first.

food production and supply, such as microbiological contamination of food (mycotoxins) or water.

Air pollution and climate change are therefore the main causes of the persistence of epidemics and pandemics and of their occurrence at increasingly frequent intervals: and they are both largely attributable to the action of man. Some other human activities that also cause air pollution and climate changes, such as intensive animal husbandry, have been identified as possible causes of the increased risk of mutations in pathogens and the spread of new epidemics. The concentration of many garments in small spaces and feeding with feed containing antibiotics favor a strong selective pressure on viruses and bacteria, which quickly change towards more aggressive strains and types also towards the human species, as it has happened with avian and swine flu.

Deforestation is also among the activities with the greatest environmental impact and at risk of favoring the spread of new viruses. With the shift of urban borders increasingly close to forests and the inevitable downsizing of the living space for wild animals, contact between them and the human species has been facilitated, which has always shared planet earth with wild animals but keeping the right distances. Without considering the habit of capturing and selling them in markets characterized by both promiscuity between several wild species and from crowding of humans. Finally, the urbanization models of the megalopolis that have concentrated millions of poor individuals in suburbs and in shanty houses without the minimum essential services together with the frantic movement of goods and people from one part of the planet to the other due to globalization, also favor the spread of epidemics and pandemics.

The fact that all the above phenomena are attributable to the action of man and his indiscriminate exploitation of the environment has led some natural scientists to qualify the contemporary geological era of history of the planet as 'Anthropocene' (Crutzen, 2002). Some social scientist think that this term is inadequate as a means of understanding the environmental changes to our planet in recent decade, suggesting as a much more appropriate alternative 'Capitalocene', as the 'age of capitalism', and calling for a different conceptual framework which places global change in a new, ecologically oriented history of capitalism (Moore, 2016). What is certain in this debate, is the need to quickly change the industrial development model by a transition towards renewable energy sources, de-pollution of the territory, of the air and of the groundwater, and rebalance of the ecosystems: under penalty of a future that is already present, reserving us new viral pandemics more serious than the coronavirus (hemorrhagic fever viruses), super-infections with bacteria resistant to any drug treatment, or extreme weather events for which it will not be possible either to discover new drugs or develop new vaccines.

2. A conceptual framework for health systems resilience governance

Once we have outlined the general scenarios within which human societies – and, particularly, late industrial societies - are moving, we will now focus on the role of the health system in coping with them. In this respect, since 2014 at the time of the Ebola outbreak in West Africa, the international debate among health care systems researchers has been dominated by the concept of 'resilience'. There is wide consensus that building or strengthening more resilient health care systems is an indispensable necessity if we want to face the above described scenarios. But the problem then becomes to define what resilience means, since it is just an um-

brella term under which various scientific paradigms and policies can be accommodated. Since this term has often been used improperly and abused in various areas, it is first of all necessary to clarify what we mean by 'resilience of a health system'. Drawing on the resilience literature, a group of British medical and social scientists of the Department of Global Health and Development of the London School of Hygiene and Tropical Medicine and of the Institute of Development Studies of Brighton has tried to clarify the meaning of this concept:

> Strengthening the capacity of health systems to manage resilience is critical to effectively continue delivering essential preventative and curative healthcare services to populations. This requires adapting and transforming the structure and properties of the health system to move it away from undesirable risk situations. However, how do we recognize situations of risks? How do we know what properties of the system are better adapted to certain circumstances? What are the potential effects of alternative routes? Who makes decisions on the directions of the health system? (Blanchet *et al*., p.431).

To answer these critical questions about the management and governance of resilience on how to manage the capacities of health systems, the group of authoritative scholars adopted a definition of resilience based on system thinking, environmental studies and complexity theories:

> We see resilience of a health system as its capacity to absorb, adapt and transform when exposed to a shock such as a pandemic, natural disaster, armed conflict or a financial crisis and still retain the same control over its structure and functions (*ibid*.).

The reference to the pandemic as one of the possible shock factors of a health system is particularly relevant to the current reality and makes the definition the researchers propose consequently quite significant for analyzing the methods of response to this event and their concrete implications in terms of health policies. On the basis of the above definition, the group developed a new conceptual framework (fig.1, adapted from Lebel *et al*., 2006) of the dimensions of resilience governance of health systems 'to help researchers dialogue with each other and generate more studies in this field' (*ibid*.)

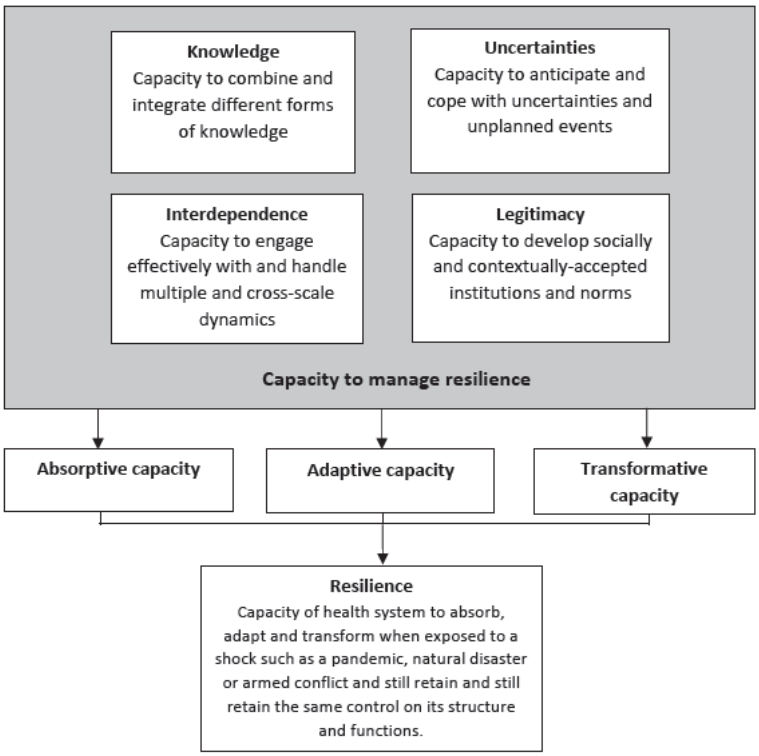
According to this framework, the four dimensions interlinked with each other that characterize the governance of resilience of health systems are:

- *Knowledge*: it refers to the capacity of health system and the mechanisms through which their actors collect, integrate and analyze different forms of knowledge and information, as well as the way this information feeds into complex decision-making processes.
- *Uncertainties*: the strategies health systems actors may adopt to anticipate and cope with uncertainties and unplanned events such as pandemics.
- *Interdependence*: the capacity of health systems to manage interdependence with other systems and the environment, to engage effectively with and handle multiple and cross-scale dynamics and their feedbacks.
- *Legitimacy*: the approaches through which health systems develop socially and contextually acceptable institutions and norms.

This comprehensive framework integrate different approaches to resilience in health systems thinking into one single approach for use by researchers, practitioners and policy-makers. Below we will apply these four dimensions to the analysis of how the health systems have responded to the COVID-19 pandemic in the inter-

national context with specific reference to the Italian National Health Service, ultimately seeking to evaluate their outcomes in terms of levels of resilience.

Fig. 1 – A conceptual framework of the dimensions of resilience governance



Source: (Blanchet et al., 2017, p.432).

3. First dimension: public health intelligence

Being able to anticipate shocks and events like a pandemic requires a functional surveillance system capable of informing health service managers and policy makers in good time about the onset of the disease and the state of its spread. This should allow them to assess whether existing resources in terms of services, staff and equipment are able to intervene early enough to isolate the infection as soon as possible, or it is necessary to fill any gaps or weaknesses.

Furthermore, decision-makers should be able to monitor risks and threats that may lie beyond the direct realm of the health system, involving other sectors (economic, social, political, etc.). For this purpose, the nature of the knowledge that needs to be collected and processed needs to extend beyond the sphere of health systems: having access to such different types of knowledge implies the capacity to engage with different social actors belonging to different spheres of society. Social network analysis (Borgatti et al., 2009) has identified the role of 'social brokers' in this respect, referring to individuals in a health system who may help coordinate actors in time of crises or shock and build bridges between different groups within the system and beyond it.

The general practitioner (GP), where it exists, is certainly one of such figures, being able to act as a gatekeeper between the people and the health care system, and as a go-between the hospital and the community health services in the territory.

His role is particularly significant in the initial phase of a pandemic, since it is in this phase of onset that precedes full recognition (Rosenberg, 1989) that its subsequent course is largely played out. In fact, at this stage, the population tends to ignore or remove the signs that indicate that something strange is happening due to a desire for reinsurance or for economic interest, that only the acceleration of contagion and mortality will force towards recognition. In this process, the role of the GP is crucial in identifying the sign of the outbreak and in motivating people to act accordingly. Moreover, he can involve social workers, volunteers, pharmacists and other people in enhancing public health ability to identify and respond to health events of potential pandemic proportion (Kahn *et al*., 2010).

The new emerging component of public health defined as 'public health intelligence' (French and Mykhalovsky, 2013), consists in the detection (possibly even anticipated) of critical health events when they occur in order to disseminate the information needed to prepare for the emergency and raise public awareness of the preventive measures to be implemented. They are those 'sentinel events' which, if promptly identified, allow early detection of a pandemic in order to predict its possible progress.

From this point of view, we can say that the Italian National Health Service (SSN) has shown itself to be very deficient overall, probably also due to its fragmentation at the regional level, since it has not been able to catch in advance the signs of the dangerous virulence of the new coronavirus. Although, in this, it was certainly in good company internationally, since we could quote the Darwinist statement such as 'herd immunity' of the British leader Johnson and the hundreds of thousands of deaths that he would have caused if he had been followed, destroying what little remains of the glorious British National Health Service; except a little over two weeks later, now positive for the virus himself, to turn towards more restrictive measures by addressing a letter to British families with a peremptory appeal: 'You must stay at home'.

Even Trump's twists and turns appear sadly unconscious, with constant head-to-head compared to the indications previously given and hyperbolic oscillations between wicked underestimation and unusual rigidity, in a country like the USA that now boasts the unenviable record of having overtaken China, the United Kingdom and Italy in first place in the world ranking of coronavirus positives and deaths[3]; while the dire predictions of the immunologist Anthony Fauci, who has led the National Institute of Allergy and Infectious Diseases since 1984, that the pandemic could have reached between 100,000 and 200,000 deaths, with millions of people infected in a country without a system adequate public health have unfortunately proved to be well founded.

Returning to the Italian case, what did not work specifically in this dimension was the network of regional and Local Health Authorities (ASL) epidemiological observatories, whose staff was often cut or sometimes even canceled, reducing them to mere bureaucratic bodies; as well as the Public Hygiene Services, often deprived of their ability to collect data and information useful for guiding consequent and timely actions. To this we can add that the National Center of Epidemiology, Surveillance and Health Promotion (CNESPS), established in 2003 at the time of the avian and swine flu pandemics, was closed in 2016, victim of the cuts of the austerity policy following the post-crisis economic and financial situation of 2008.

[3] 1,547,973 cases of infection and 92,923 deaths (source: WHO, *Health Emergency Dashboard*, May 23, 2020).

4. Second dimension: coping with uncertainties

Even when managers and political decision-makers have adequate and relevant information at their disposal, the decisions to be taken regarding the most appropriate strategy to be adopted are still complex: and this essentially depends on the uncertainty and unpredictability regarding the spread of the infection. Here then, in the face of the limits of any technocratic rationality, considering the need to take preventive action as quickly as possible, the best strategy becomes to involve the actors and services most directly facing the pandemic process: territorial medicine and proximity, primary care.

This is clearly possible only if one has an adequate network of territorial integrated health services (social-health districts, health centres, dispensaries, etc.) and health and social professionals (general practitioner, pediatrician, family and community nurse, community midwife, social worker, social-health worker, community pharmacist, etc.) able to act as a two-way communication channel between the health system and the population: detecting critical events promptly and consequently disseminating the necessary information. This network also becomes essential to have primary health care services capable of filtering any emergency hospitalizations appropriately when really necessary, without overloading unnecessarily secondary hospital care.

The difference between what happened in Italy in different regions is paradigmatic from this point of view. In Lombardy Region, all the territorial community health and socio-health services, from nursing to rehabilitation, have been outsourced and privatized. Family medicine has been partly protected by the national category contract, and Lombard citizens were able to continue to choose their GP. However, the organizational structure of the territory was weakened considerably and there have been repeated attempts over the years to make it more precarious and inefficient. In 2011 the Lombardy Region established the *Chronic Related Groups* (CReGs), a project whose declared objective was to improve the living conditions of citizens suffering from chronic diseases; in reality, the undeclared one of reducing the role of GPs in the general management of chronic patients: opening it to any other type of provider, in particular private providers able to manage complex care paths remunerated through a flat-rate budgeting system similar to hospital *Diagnosis Related Groups*, DRGs (Maciocco, 2020).

The project failed, but the Lombardy Region tried again a few years later with a new project entitled 'Taking charge of the chronic patient', always based on the idea of replacing the family doctor (GP) with private providers and complete the original primary care network annihilation project. But the project once again failed for two main reasons: private providers showed no desire to take on the assistance of chronic patients poorly paid and poorly qualified for centers of excellence such as theirs; and chronic patients themselves, who have the choice of indicating the provider to trust, refused to bring their disease to the market and decide not to choose. In the meantime, the most fragile elderly and chronic patients without adequate community care flocked to private nursing homes, the *Residenze Sanitarie Assistenziali* (RSA), of which Lombardy has the Italian record for number of structures and beds: and it is right there that most of the over 15,000 Lombard deaths caused by the pandemic from Covid-19 occurred, a figure certainly underestimated, as shown by data of the joint report by the National Institute of Statistics and the High Institute of Health (ISTAT & ISS, 2020).

It is in this way that the network of General Practitioners and of social-health districts, crucial in intercepting a patient at the onset of symptoms and avoiding

that degenerates, has been dismantled over the years in Lombardy. Moreover, with the 2015 regional reform that transformed the Local Health Authorities (ASL) into ATS (Health Protection Agencies) - bureaucratic bodies with mere administrative control of the activities of the hospitals, poorly equipped and skilled in public health - the mortification of the fundamental role of gatekeeper of the general practitioner and the privatization of most of the territorial socio-health services, as well as of the hospitals, was completed.

Things have gone quite differently in other Italian regions with much lower infected cases and mortality rates such as Veneto, Tuscany and Emilia Romagna, where territorial medicine has instead maintained a fundamental role in both prevention and primary care, and the organization of the health care is based on the principles of a comprehensive primary health care with multidisciplinary primary care teams strongly linked with a specific territory and with the community. A fundamental role has been played here by the USCA (Special Units of Continuity of Assistance) in guaranteeing an early management of the infected and their care at home; as well as adequate coordination between the territory and the hospital that would allow avoiding the fragmentation of services and the overload of hospitals due to improper or late hospitalizations in intensive care; which is what happened instead in Lombardy, producing the clogging of intensive care and the wicked choice to build useless (temporary?) hospital structures which were then largely unused.

Something similar to what has happened in Lombardy is currently replicated in USA, not casually the reference model of Lombard healthcare: even due to the absence of an appropriate public health network, initially president Trump heavily underestimated the risks of spreading the epidemic, opting for a natural diffusion policy also under the pressure of the economic lobbies strongly concerned about the consequences on the economy that a lockdown could have produced. Then, when faced with the spread of the contagion and the growth of the dead, this choice appeared politically unpopular in view of the forthcoming elections, Trump declared the national emergency very late only on March 13, when COVID-19 was widespread in 49 out of the 50 states. At that point, Vice President Mike Pence, official pandemic manager, said the government strategy would consist of a public-private partnership with health insurance companies, pharmaceutical companies and private laboratories to make the diagnostic test available, otherwise not guaranteed by public facilities. That this was not enough, it is demonstrated by an American Medical Association statement complaining about the insufficiency of the diagnostic resources put in place and the protests of many doctors without protective devices, as well as the insufficient possibility of access to MEDICAID[4] for the infected poorer.

5. Third dimension: the management of interdependence

A health system is inextricably horizontally embedded within the other subsystems of the society (political, economic, judiciary, social, cultural), and across scales at the different vertical levels of the supranational, state, regional and local institutional structures. All this implies the need for a governance of the dynamics of multiple inter-sector interdependencies and institutional multi-levels which is somewhat complex but necessary if one want to keep under control the different

[4] The public insurance for the poorest people in USA, differently managed by each state.

factors and actors that influence the functioning of health systems as well as the health of citizens. This also implies recognizing that a pandemic is not only a health emergency problem, since its impact will involve all the above aspects in their complex interactions.

The absence of a capacity to handle effectively multiple interdependence dynamics has been dramatically exemplified by the case of USA, where the clash between the logic of the economy in a neoliberal perspective of minimal state intervention and that of the health emergency - which would have required a decisive public health intervention since the beginning of the pandemic - has appeared immediately evident. Confirming the fact that it is once again the poorest and most marginalized people who pay the consequences of (non) political choices: while the probability of coronavirus infection of an African American was 5 times compared to a WASP (white, Anglo-Saxon protestant), that of an Hispanic was 2 times. At the macro-level, the US economic growth trend has reversed, the number of unemployed in the US has jumped to 36 million in a few weeks, leaping to 14.7% of the workforce, effectively deleting all the new jobs that were created after the 2008 financial and economic crisis. If we consider that, in a health system like the US in which the private health insurance is based on the workplace, whereby losing the job also means losing health coverage, we understand what this means in the event of a pandemic.

Moreover, the decentralized and plural nature of the US federal political system has not only prevented any adequate multilevel governance, but has triggered a strong institutional conflict between the White House and the states with democratic governors such as California, who have opted for much more rigorous lockdown containment policies, criticizing the confused and contradictory messages that have followed one another from the federal government: and in response they have seen to foment armed revolts against the lockdown by white suprematist and neo-Nazi extremists supported by the White House.

If we focus on the vertical multilevel governance in the Italian case, the clear disarticulation that the COVID-19 pandemic has highlighted (if it was still needed) among the different institutional levels of the NHS immediately emerges; and, in particular, between the national and regional governments. The process of devolution from the central State to the Regions that followed the modification of Title V of the Constitution (l.cost. 3/2001), with the *de facto* transformation of the NHS into 21 Regional Health Services (SSR), in recent years has especially become an occasion for increasingly frequent conflicts and indeed open institutional clashes between the State and the Regions, especially in the context of the State-Regions board, which should have been the instrument of conciliation of divergences and compensation for inequalities that the so-called 'federalism' (in reality, an accentuated regionalism) has inevitably produced.

The trend toward an increasingly weaker role of the State compared to an ever stronger one of those Regions (Lombardy, Veneto, Emilia-Romagna) which, by virtue of the economic weight they represent, have come to claim the so-called 'differentiated autonomy' - that is, the request for a further greater devolution by the State only to them, with the acquisition of exclusive power over various matters including health - has done nothing but throwing further fuel on the fire of the institutional clash now open between the stronger Regions (those of the Center-North with devolution), the weakest Regions (those of the Center-South and Islands, most of which, besides, under recovery plan by the State due to their mismanagement in the health sector) and Central State, sanctioning the *de facto* end of any effective unitary and universalistic national health service.

The ups and downs of claims and of blaming each other between the various institutional levels (Regions and State) that has occurred at the time of Covid-19 has thus patently made clear among public opinion what had so far emerged only in institutional settings as the true price to pay for all this: that is, a situation of increasingly clear differentiation and inequality of Italian citizens with respect to the possibility of access to treatment and to the same probability of survival (see impossibility of access to intensive care). All this has begun to put on the agenda the need for an overall rethinking of the institutional architecture of the Italian National Health Service and its possible (partial?) re-centralization.

6. Fourth dimension: building legitimacy between consensus and control

The final important component of resilient health systems relates to the necessity of community trust, of building a trusting relationship with populations: 'This can be built through an inclusive consultation process engaging communities meaningfully as the users of the health system in the development of policies and management of healthcare services where patients are placed at the centre of the system. … (*This*) requires trust and accountability to exist or be built at every level of the health system: from the patient, to the community health worker, the nurses at the health centre, to medical and managerial staff at higher level' (Blanchet *et al*., 2017, p.433).

In the Asian cases, this problem of legitimacy has appeared less important. In China, the first country where the pandemic started on December 2019, the monocratic structure of the Chinese one-party system reacted to the first signs of the occurrence of the coronavirus in two stages: first trying to deny the event by arresting the doctor who first identified it, covering up his diagnosis and the alarm, since it would have discredited local authorities in the eyes of the central government; then, when the spread was such as to no longer allow any cover-up, with the adoption of draconian lockdown measures of the entire population of the city of Wuhan first, then of the surrounding province of Hubei and of major cities such as Beijing and Shanghai, with the closure of all production activities, the limitation of public transport and non-essential commercial activities, and the carrying out of mass compulsory diagnostic screening. The Confucian cultural tradition, recently officially resumed in the last congress of the Chinese Communist Party and included in its political strategy with the idea of 'social harmony' and an ethics of virtues which includes respect for state authorities, has formed the dominant value background which has legitimized such restrictive political choices; however, reinforced by an efficient action of rigid social control implemented by the local police (night curfew and limited possibility of leaving the house) also with the aid of technological digital contact-tracing devices. The absence of riots, public demonstrations or any other significant event of dissent seems to have confirmed the firm control by the government authorities of the social processes induced by the rigid containment strategy adopted.

The same choice of a policy of strict containment of the pandemic was also effectively followed by other Asian countries, of which another most exemplary case is that of South Korea. Despite the significant difference in political and institutional contexts compared to China - South Korea is a liberal democracy - it has adopted a rigid containment strategy very similar to the Chinese one, with two particularities. In addition to a more limited lockdown and a voluntary social distancing, mass driving diagnostic screenings were carried out for hundreds of thousands

of people in a few days, mandatory for groups considered at risk; and geo-localization by contact-tracing via mobile networks of the infected ones, use of their credit card transaction data, and the publication of their movements on blogs characterized this type of strategy in a hyper-technological sense.

In the Italian case, the transition from a softer strategy of underestimating the pandemic problem to a more difficult (albeit fairly late) one of social containment, involving forms of 'social distancing' and domestic segregation of citizens, has clearly led to the need to legitimize at the media level these measures that seriously restricted privacy and personal freedoms in the name of security and collective health, against a public opinion traditionally reluctant to such forms of social control. It is therefore understandable that all this raised a serious problem both in terms of privacy and of more general social control, which is still open to various solutions, including the recruitment of volunteers to control the movements of people and dissuade any dangerous gatherings due to the non-respect of social distancing measures.

A problem to which public health at international level has historically responded by oscillating between the two opposite polarities of the pre-eminence of individual freedoms (neoliberal policies of the English-speaking countries) or of public constraint (authoritarian policies of surveillance capitalism in Asian countries). If in the first case we have witnessed the substantial impotence of the policies implemented by the British and US governments based on the mere persuasion of citizens, in the second case the policies banning all freedom of movement of the Chinese government or the geo-localization ones through the traceability of mobile networks and other personal information from the South Korean government have certainly proven to be more effective.

Therefore, is there no alternative to the opposition between ineffective freedom and authoritarian but effective constraint? That the risk is also, in the second case, of having public health reasons offered by the pandemic underway to implement forms of 'authoritarian democracy' such as that of Orbán in Hungary assuming full powers for an unlimited time with a special law, closing the parliament and gagging the opposition, is an additional element that must make us reflect before marrying the 'Asian way' as the only possible one: 'The indefinite and uncontrolled state of emergency cannot guarantee respect for fundamental democratic rights', sentenced the Council of Europe.

How to avoid, then, that the sacrosanct measures from the point of view of public health of 'social distancing' at the time of the pandemic of COVID-19 become the instrument to experience that 'state of exception' of which Agamben wrote (2003), meaning the suspension of the current constitutional order made by the same state authority which should normally guarantee the legality and its respect? Here it is a question of balancing two rights: the right to collective health and to the life itself of people on the one hand; and the civil rights of freedom, movement, expression and association on the other.

The connective element between collective health and individual freedoms can be traced in considering solidarity the interface capable of combining and reconciling those two rights that are only apparently conflicting, but in reality both to be pursued even in exceptional emergency situations such as the pandemic . And what is solidarity if not the most complete expression of the founding principles that are at the origin of the so-called European social model (Ferrera, 2005)?

Conclusions: three levels of resilience

At the end of this reflection, what conclusions can we then draw on the overall assessment of the ways in which the health systems have responded to the pandemic of COVID-19? In the conceptual framework that we initially adopted (fig.1), three levels of increasing resilience are envisaged according to the response capacity of a healthcare system (Blanchet *et al*., 2017, p.432]: *absorptive*, *adaptive* and *transformative*. In the first case, the system limits itself to being able to neutralize the impact of the shock produced by the pandemic simply by trying to continue providing the same qualitative and quantitative level of care and people protection despite the shock by using the same resources and capacities. Since this often proves impracticable, the other two possible outcomes remain.

In the case of *adaptive resilience*, the health system recognizes the need to practice some form of adaptive change (which could be both improving or worsening, depending on the point of view) that still allows it to survive with fewer and/or different resources, which requires making organizational adaptations without substantial changes. On the other hand, the case of *transformative resilience* entails a substantial structural and functional change of the system itself (also potentially improving or worsening, depending on the point of view adopted) to better adapt to the change that has taken place as a consequence of the shock.

In the Italian case, an initial phase of absorptive type which tried to keep the functioning of the system unaltered by underestimating the pandemic problem has then been followed by a second adaptive phase which involved a significant reorganization of the system. with the re-functionalization of hospital wards to COVID-19 wards, recruitment of new medical and health personnel, strengthening of intensive care. If, in the coming months, all this may also entail the further transition to a form of transformative resilience by virtue of an overall restructuring of the NHS (e.g., with a partial re-centralization), it is still too early to say.

On the other hand, in the Asian case we have witnessed an effective transformative capacity of health systems such as the Chinese and South Korean ones, which have been able to change the structure and function of the health system to respond to the covid-19 shock. However, the function of these health systems has become predominantly of strict social control, not guaranteeing respect for individual civil rights and freedom.

Finally, in the American case, the absorptive capacity of the healthcare system allowed it to continue operating as usual, without any substantial specific adaptive and even less transformative change. However, this has been achieved at the cost of maintaining and, indeed exasperating, the same profound iniquities on which this private system is based: the image of President Trump returning to play golf in his estate while the pandemic victims is now close to exceeding one hundred thousand deaths is a plastic representation of the cynicism with which the logic of profit is seasoned.

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