

# Coronavirus disease 2019: the second wave in Italy

Coronavirus  
disease 2019

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## Abstract

**Purpose** – This paper describes how Italy addressed the first Coronavirus disease 2019 (COVID-19) wave and analyzes the possible causes of the current second wave.

**Design/methodology/approach** – Descriptive analysis of critical points and differences in the containment strategies between the first and the second waves in Italy.

**Findings** – Italy's strict lockdown has been credited with getting the initial major outbreak under control. Furthermore, the way Italy handled the first wave was considered a lesson for other countries. On the contrary, a decentralized and highly bureaucratic political system with low coordination and political conflicts between government, regions and stakeholders led to a relaxation of individual health behaviors, poor and conflicting communication to the general public, poor management of the public transport and the reopening of schools and companies after the summer, that in turn generated the second wave, which is showing signs of becoming worse than the first.

**Originality/value** – This is a commentary piece.

**Keywords** COVID-19, Policymakers, SARS-CoV-2, Italy

**Paper type** Viewpoint

## The first COVID-19 wave in Italy: pros and cons

At the beginning of the Coronavirus disease 2019 (COVID-19) pandemic, Italy was probably the worst-affected country in Europe. Dating from the first official case in Codogno on 21 February 2020, and as of May 6, 2020, 214,457 Italian people had a confirmed diagnosis of the COVID-19 infection [1]. The rapid surge of cases and the limited capacity of intensive care beds posed a serious threat to the Italian national health system that was close to breaking point [2]. Thousands of medical staff were infected with the virus and many of them died [3, 4]. Healthcare facilities and nursing homes were the main sources of outbreaks due to hospital

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overcrowding and the presence of numerous asymptomatic infectious, as well as older and susceptible patients [5]. However, the Italian healthcare system response, including the recruitment of 20,000 health workers, the allocation of 3,800 respiratory ventilators [6, 7], an invaluable and extraordinary commitment of healthcare staff [4], together with the concomitant imposition of nonpharmaceutical interventions (NPIs) such as the closure of schools and nonessential activities, and quarantine measures up to a generalized lockdown throughout the country alleviated the pressure on the healthcare system [1]. Italy's strict lockdown—one of the world's longest—was credited with getting the initial major outbreak under control [8], and the way Italy handled the first wave was considered a lesson to other countries [9, 10]. NPIs may change the effective reproduction number ( $R$ ), which is the average number of infections produced by a single infected person in a population with partial immunity. This finding was confirmed by Li *et al.* [11] for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in 131 countries in the first half of 2020. Further, an epidemiological analysis across eight countries conducted by Balmford *et al.* [12] showed that a further week-long delay in imposing lockdown during the first wave would likely have cost more than half a million lives. Moreover, linking the timing of lockdown and consequent deaths to economic data, the authors revealed variable costs that national governments were implicitly prepared to pay in order to protect their citizens.

### **The day after the first wave**

In Italy, the improvement of the epidemiological situation has allowed an easing of the restrictive measures. On 4 May, Italy entered the “second phase” of its coronavirus lockdown. The progressive easing of lockdown, in combination with contact tracing, isolation and testing activity, and widespread compliance with safety measures by citizens led to a progressive restarting of work activities associated with a relief of the socioeconomic situation. This is in contrast to other European and non-European countries where the pandemic was probably less effectively controlled due to less stringent restrictions so that the second wave in other European countries was anticipated and more sustained [13]. Amid the ongoing pandemic, learning lessons from the first wave would have been useful for Italian policymakers to organize in the best way possible, the response to an expected second wave. However, a decentralized healthcare system and a highly bureaucratic political system with low coordination and conflicts between government, regions and local authorities [6] resulted in ineffective economic investments, and the inability to restructure the Italian healthcare system at territorial and hospital levels, at least in the current state. Furthermore, the general improvement of the epidemiological situation and a conflicting communication by stakeholders to the general public resulted in an excessive feeling of false security and relaxation of individual health behaviors, i.e. low compliance with universal mask use, hand hygiene and physical distancing measures. Probably, in times of pandemic, knowledge of the problem does not automatically translate into the same level of awareness and attitude by the public, whereas psychological, social and economic implications tend to play a prevalent role. As described by Richard Horton, this pandemic should be considered a “syndemic”, i.e. an event “characterized by biological and social interactions between conditions and states, interactions that increase a person's susceptibility to harm or worsen their health outcomes” [14]. All these factors, therefore, consequently led to a new rise in the curve, during the second half of August 2020, while the Italian government ministers and health experts via the media insisted that the new outbreak in Italy could be kept under control and that hospitalization rates were low [15]. But in fact, Italy was entering the second wave of the pandemic.

### **The second COVID-19 wave in Italy: what next?**

In September 2020, the reopening of the schools was considered by the government as “an absolute priority” [16]. Since, despite the implementation of health measures within schools,

new and significant outbreaks began to increase in number having begun in the bigger Italian cities (i.e. Milan, Napoli and Rome). This may have been due to a combination of two main reasons: (1) the crowded public transport system that was needed to ensure the operation of schools and business, which neither regions nor local authorities had reorganized in time to address the risk of COVID-19 transmission and (2) the reopening of companies and restarting ordinary activities. Therefore, since early October 2020 all the epidemiological indicators, i.e. new infected cases, number of serious or critical cases and new deaths suddenly increased in the wake of the current impressive trends of other European countries (i.e. France, Spain, and the UK). As of 18 October 2020, the  $R$  number across the 21 Italian regions ranged between 1.24 and 1.72 [17]. By this point, the testing, tracing and isolation strategy, which is the first line of defense against the virus, had been broken.

The new containment measures carried out by the recent Decree of the Council of Ministers DPCM 18 October 2020 and those provided by the Decree released by the Lombardy Region on 16th October 2020 were considered by health experts as too weak to effectively address a second wave. In the meantime, COVID-19 was affecting the southern regions of the country, as well. While further restrictive measures and a new lockdown were expected by the public, conflicts and a lack of cooperation between government, regions and stakeholders continued amid the general confusion and uncertainty that had the potential to increase a high burden of distress and mental health outcomes among the public.

### **Implications for stakeholders and policymakers**

The  $R$  number, which for SARS-CoV-2 lies somewhere between 2 and 3, has been proposed to gauge whether pandemic mitigation is working, and, therefore, it determines the next steps to be taken by policymakers [18].

To size the restrictive measures, it is also important to consider the fundamental engines that drive this pandemic. Indeed, the majority of SARS-CoV-2 infections likely occur within households and other residential settings. Furthermore, large transmission events may occur through asymptomatic or symptomatic “superspreaders” who are undetectable (the so-called “overdispersion” phenomenon). For this reason, interventions targeted at settings conducive to superspreading (such as mass gatherings and hospitals) may have an outsized effect [19]. However, these targeted interventions work better if applied at an early stage of the curve. Indeed, populations can take weeks to adjust their mobility patterns in response to the imposition of NPIs and, therefore, NPIs did not exhibit their maximal effect on  $R$  until up to 28 days later [18].

For this reason, there is ongoing heated debate between the central government and regions about the severity of the restriction measures that are needed to control the COVID-19 contagion curve [20].

The dilemma of choosing between a new generalized lockdown that would accentuate the economic recession of the country and a highly probable breakdown of the healthcare system, which in recent years has been undermined by economic cuts imposed by the European Union, makes the situation intolerable and depicts this second wave as worse than the first.

As stated by Pope Francesco, a global solution is needed to tackle the pandemic [21]. The right to collective health, rooted in the Italian Constitution, is core to the effectiveness of other rights such as the right to free movement and economic initiative. Choosing between saving human lives and saving business ventures should not be a moral dilemma, as human life and money cannot be equated [22].

However, to solve this dilemma, a new global economic system should be set up. This pandemic continues to draw attention to health [23], social and economic inequities among and within the countries [24]. While waiting for a vaccine available for all people, the

pandemic should be addressed through a comprehensive approach, just as the syndemic approach described by Richard Horton. Indeed, social and economic networks in a globalized world are too closely connected and, therefore, remain the critical nodes of the solution.

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