



A comparison of the differences in public risk perception and public health policies between the first and the second wave of COVID-19 pandemic in Italy

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Abstract

The paper presents the information on COVID-19 policy response in Italy in the second half of 2020, when the second wave of the pandemic occurred. It builds on the authors previous report that addressed the first wave of the COVID-19 pandemic. In Italy, from October till December, the number of SARS-CoV-2 infections increased significantly. However, the Italian government, unlike many other European governments, refrained from introducing a second nationwide lockdown. The pandemic was managed through a system of localized interventions (on a regional and/or provincial basis) which significantly varied across the regions. At the end of December 2020, a national plan for vaccination against COVID-19 was approved. In February 2021, together with the change of government, a new public policy against the COVID-19 pandemic was formulated.

Key words: COVID-19 pandemic, health policy, Italy, public health, policymakers

Słowa kluczowe: COVID-19, polityka publiczna, polityka zdrowotna, Włochy, zdrowie publiczne

Introduction

The COVID-19 pandemic has exacerbated the weaknesses of the Italian healthcare system, which is mixed (public and private) and decentralized, therefore, characterized by a fragmentation of different regional healthcare systems, with different capacity and financing power, leaving the Italian government with a weak strategic leadership [1]. For instance, in 2017 the density of ICU beds is quite heterogeneous throughout Italy, ranging from 9.4/100,000 inhabitants in the central area to 7.8/100,000 in the islands (national mean value: 8.7) [2]. Furthermore, while the hospital and emergency system is quite efficient, at least

in the northern regions, the territorial services are very lacking in resources.

The Italian decentralisation and fragmentation of health services seem to have restricted timely interventions and effectiveness during the first wave of the pandemic [3, 4]. The improvement of the epidemiological situation at the end of April has allowed easing the restrictive measures, with a progressive restarting of labour market activities. The Government has adopted a series of measures aimed at the resumption of tourism and production activities. Citizens received financial incentives to go on vacation. Large sums of public money have been spent for buying individual school desks, but no economic investments were made to

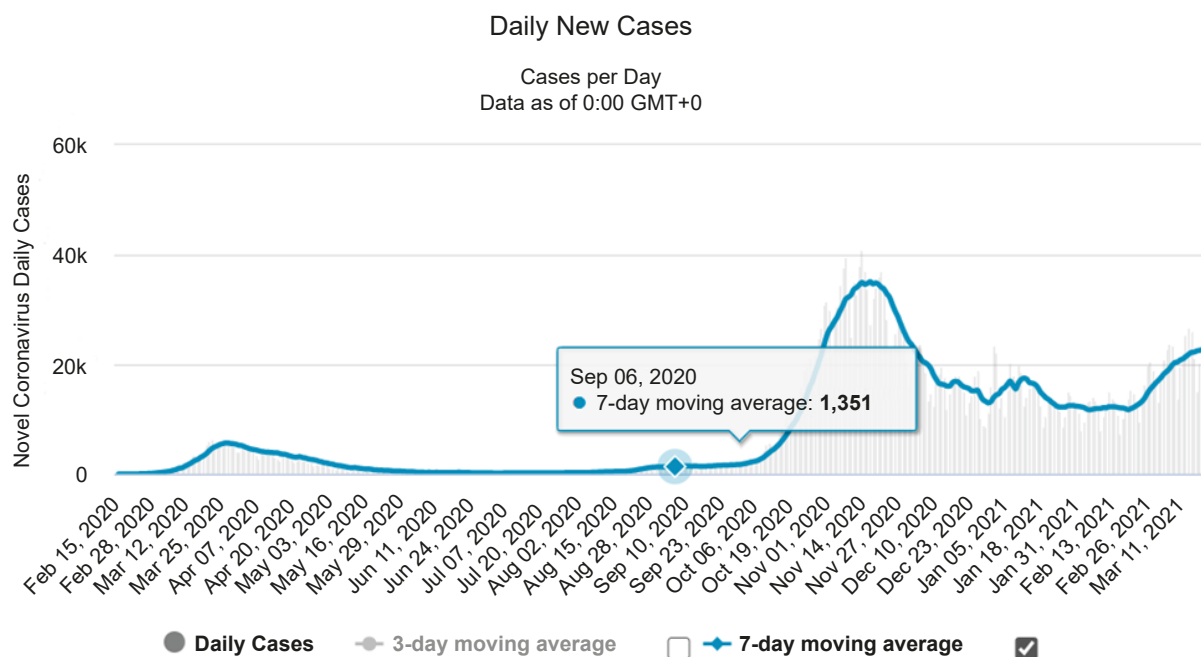


Figure 1. Trend of daily new COVID-19 cases in Italy (from February 15, 2020 to March 11, 2021)

Source: [5]

improve public transport, infrastructure, and local health services [3]. Moreover, despite the Technical Scientific Committee established by the Ministry of Health called for caution, a number of medical experts interviewed by media supported the feeling that the pandemic was close to being resolved. In times of pandemic, mass media play on both the level of knowledge and the feelings of the general public, and public perception of health risk plays a key role in the adoption of healthy behaviours in compliance with the safety measures imposed by Governments and policymakers [4]. But more relevant to public health is that the media, through public opinion, influence governments. Thus, the relaxation of lockdown measures, in place since March 2020, resulted in the resurgence of COVID-19 cases.

Second wave of the pandemic COVID-19 in Italy

In the second half of August (on 21 August), almost a thousand new cases of infection were registered ($n = 947$), being the highest number after the end of the first wave, and, since 1 October 2020, more than two thousand new cases were registered every day. As shown in Table 1, on 13 October 2020 the COVID-19 contagion curve had a rapid rise with 5,913 new daily cases [5].

The second wave in Italy peaked on 13 November 2020 with 40,896 new daily cases. On 03 December 2020, daily deaths peaked 993. The less stringent measures carried out in the face of the second wave by Government and regions lowered the curve but without flattening it.

On 28 December 2020, Italy reported the lowest daily COVID-19 cases ($n = 8,583$) since the mid-October (on 14 October, 7,331 daily cases). Since that, the curve of new daily cases has remained stable. On 25 February, however, 19,875 new daily infections were the beginning of a curve with a current tendency to growth, which is probably that of the third wave, caused likely by a relaxation of preventive measures and the diffusion of apparently more transmissible viral strains [5].

Action taken in health care system and economy

During the first wave, the public health policies were imposed by the Central Government in all the country with Decrees of the President of the Council, amid the tension and conflicts arising between Regions and Government. Therefore, as restriction measures adopted during the first generalized lockdown were severe, leading to negative psychological and economic outcomes on vulnerable strata of the population, in the second half of 2020, there was a gear change in public health strategies, with an attempt to coordinate the actions of Government, Ministry of Health and the Regions [6, 7].

Differently from the first wave, during the second wave, Regions were enabled to take “data-driven” and targeted measures on the basis of the local curve trends. In this way, Regions were allowed to enhance stricter measures than those established at national level. The Italian Ministry of Health, coordinated by the Technical Scientific Committee, assigned a dynamic risk score to each of twenty Italian

regions, on the basis of the COVID-19 data transmitted by each Region. This risk score was substantially based on the local transmissibility of SARS-CoV-2 and on the strength of the regional healthcare system. These different risk scenarios (yellow, orange and red flags) were associated, therefore, with increasingly restrictive measures, from the lowest (yellow) to the highest (red) risk band. In “red” regions, the Government required a full lockdown based on restrictions to individual mobility and closure of schools and public/private events; in “orange” regions a partial lockdown, and in “yellow” regions, people had to wear protective mask against droplets of the coronavirus into the air and respect social distancing [8, 9].

Throughout 2020, the Italian government allocated a lot of funds to support the workers and business during the time of pandemic and lockdowns. The blocking of layoffs and the granting of economic benefits have so far mitigated the effects of the economic and social crisis caused by the pandemic. The Redundancy Fund (Cassa Integrazione Guadagni, CIG), for instance, aimed to help the factories in financial difficulties, by relieving them from the costs of unused workforce, supporting as well as those workers that might lose part of their income.

The Italian government took also measures for supporting family and working parents (bonus for babysitting services, parental leave, telecommuting, economic support for schools), social safeguards measures (e.g. education for disabled students, and emergency income for families with disabled members), tax subsidies, income protection including emergency income.

Public opinion

In Italy, the transition from the first to the second wave of the COVID-19 pandemic was preceded by a significant change in public opinion [1] and the euphoria generated by the feeling that, after three months of strict lockdown, the epidemic was over [2].

During the second wave, the Italian government attempted to save lives while preserving the economy as much as possible. This led to disagreement concerning the new restrictions in economic activities. On 20 October 2020, the Ipsos polls showed a balance between people in favour and against a new generalized lockdown, with two thirds of citizens not expecting lockdown [10]. The public opinion was split in two parts: on the one hand, those most economically affected by the pandemic (e.g., traders, restaurateurs, entertainment workers, tourism workers, workers in non-competitive sports and leisure activities) expressed the need to plan – albeit in safety – the reopening of economic activities, and, therefore, protested severely due to an uncertain and rapidly changing system of closure and re-opening of the activities. On the other hand, the majority of people, including industrial and tertiary workers, showed a more prudent attitude. As in the first wave, the formation of the public opinion was completely delegated to the media, including messages from authorities on appropriate healthy behaviours, and inconsistent interventions by influential people, public health experts

and medical doctors. However, the institutional websites of the Ministry of Health and the National Institute of Health have continued to inform citizens with clear models and action scenarios, by updating the content with evidence-based, evolving, knowledge.

Influence and cooperation within the EU

In Italy, after the 2008 economic crisis, the spending review imposed by European Union led to shortage of healthcare personnel and closure of healthcare facilities to rationalize the national expenditure. Therefore, Italy’s wealthiest regions, like Lombardy, financed private healthcare structures, weakening the public territorial primary care system. Indeed, few private hospitals in Italy (less than 10%) have accident and emergency services, since most private hospitals concentrate on profitable services [11]. Furthermore, in Italy the primary care system is fragmented and difficult to manage and with an aging workforce which is a further barrier to change in the culture of care [11]. In July 2020, a reinforcement of the Italian healthcare system was announced to tackle the emergency situation, with an European Investment of the EU Bank of €2 billion loan covering around two-thirds of the resources needed for the operations contained in a decree for revival of the healthcare system [12]. In the meanwhile, overall spending on health care, both at national and regional levels, has been significantly increased. The shortage of healthcare workers has been addressed with the recruitment of retired workers. Healthcare facilities and hospitals have suspended ordinary care activities when needed on the basis of the curve of contagions. Hotels and residential structures have been utilized for people in need of isolation at local level. Testing and tracing have been enhanced during the second wave, with an increasingly number of daily swabs. Mandatory health surveillance programs were enacted in high-risk sectors (e.g. healthcare, police, etc.) and voluntary swabs and serological testing programs were carried out in all other occupational categories.

The way in which the European Community has treated the procurement of vaccines for all Member States and the great work of the EMA (European Medicines Agency) in the timely approval of available vaccines (without derogating from safety standards) have contributed to strengthening the perception of a more united and cohesive Europe among EU citizens. Moreover, the EU have pledged over €2.2 billion to COVAX, the global initiative aimed at ensuring equitable access to COVID-19 vaccines and are supporting vaccination campaigns in partner countries. This increased the perception of cooperation within the EU and the international solidarity in general, as a hope for containing the COVID-19 pandemic [13].

The beginning of 2021

On 17th December 2020, a national plan for a mass vaccination program against COVID-19 was approved. According

to this strategic plan priority in vaccination was given to high-risk categories (i.e. healthcare workers, workers employed in hospitals, elderly) [14].

In 2021, the availability of vaccines, although still limited in relation to needs, opened a new phase of intervention, focusing on the implementation of measures to promote vaccination of the population. Italy has decided to vaccinate health professionals first and has introduced obligatory vaccination for front line healthcare operators. There are still problems in reaching the most sensitive sections of the population, the elderly, while there is a strong competition between different professional categories, each of them requiring to be vaccinated first.

On 13 February 2021 another change of the public policy strategy connected with pandemic took place, when the new Italian President of the Council, Mario Draghi, the former head of the European Central Bank, was invited by the Italian President of the Republic Sergio Mattarella, to form a government of national unity in the face of the COVID-19 crisis [15]. Mario Draghi fired the special commissioner Domenico Arcuri and replaced him with an army logistics expert, to speed up the mass vaccination program [16]. A new phase started with better coordination between Government and the Regions, an increased leadership of Italy in the old continent and a closer collaboration with European partners.

References

1. Magnavita N., Chirico F., Sacco A., *The First Wave in Italy: Pros and Cons*, "Zeszyty Naukowe Ochrony Zdrowia. Zdrowie Publiczne i Zarządzanie" 2020; 1.
2. Teixeira da Silva J.A., Tsigaris P., *The role of lockdowns and health policies for COVID-19 in Italy*, "Italian Journal of Medicine" 2021; 15 (1): 1–6.
3. Chirico F., *Il rischio biologico nella scuola*, Edizioni FS, Milano, Italy 2020.
4. Motta Zanin G., Gentile E., Parisi A., Spasiano D., *A Preliminary Evaluation of the Public Risk Perception Related to the COVID-19 Health Emergency in Italy*, "International Journal of Environmental Research and Public Health" 2020; 17 (9): 3024, doi: 10.3390/ijerph17093024.
5. *Italy Coronavirus: 3,356,331 Cases and 104,642 Deaths*, Worldometer, https://www.worldometers.info/coronavirus/country/italy/?filter_by=review_high&fbclid=IwAR3w8DlcyARvzzW4BC90vID4znE9Zf-QqkWtf1m9sbII_Ak80t9Y9hrSr6I&page=4&utm_campaign=targetingMN&utm_medium=display&utm_source=facebook (accessed: 4.04.2021).
6. Jones G., Parodi E., *Italy's National Unity Splinters in Face of COVID-19 Second Wave*, 9 Nov 2020, <https://www.reuters.com/article/us-health-coronavirus-italy-disunity-idUSKBN27P1J9> (accessed: 21.03.2021).
7. Armocida B., Formenti B., Ussai S., Palestra F., Missoni E., *The Italian Health System and the COVID-19 Challenge*, "The Lancet Public Health" 2020; 5 (5): e253, doi: 10.1016/S2468-2667(20)30074-8.
8. Coccia M., *How is the Impact on Public Health of Second Wave of COVID-19 Pandemic Compared to the First Wave? Case Study of Italy*, MedRxiv, 2021, doi: <https://doi.org/10.1101/2020.11.16.20232389>.
9. Chirico F., Sacco A., Nucera G., Magnavita N., *Coronavirus Disease 2019: The Second Wave in Italy*, "Journal of Health Research", February 2021 (ahead-of-print), doi: 10.1108/JHR-10-2020-0514.
10. IPSOS, <https://www.ipsos.com/it-it/litalia-ai-tempi-del-coronavirus-24deg-update> (accessed: 4.04.2021).
11. Garattini L., Zanetti M., Freemantle N., *The Italian NHS: What Lessons to Draw from COVID-19?*, "Applied Health Economics Health Policy" 2020; 18 (4): 463–466, doi: 10.1007/s40258-020-00594-5.
12. *Italy: COVID-19 – EIB Lends € 2 Billion for the Healthcare System*, <https://www.pressreleasepoint.com/italy-covid-19-eib-lends-2-billion-healthcare-system> (accessed: 21.03.2021).
13. European Commission, *Safe COVID-19 vaccines for Europeans*, https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/safe-covid-19-vaccines-europeans_en (accessed: 4.04.2021).
14. Ministero della Salute, *Guidelines of the Strategic Plan on COVID-19 Vaccines Approved by Parliament*, <http://www.ministerosalute.it/portale/nuovocoronavirus/dettaglioNotizieNuovoCoronavirus.jsp?lingua=italiano&menu=notizie&p=dalministero&id=5208> (accessed: 4.04.2021).
15. *Mario Draghi Becomes Italy's New Prime Minister after Weeks of Infighting*, CBC News, <https://www.cbc.ca/news/world/italy-draghi-new-government-1.5912582> (accessed: 4.04.2021).
16. *Italy's Draghi Fires COVID Commissioner, With Vaccination Drive in Spotlight*, Reuters, <https://www.reuters.com/article/us-health-coronavirus-italy-commissioner-idUSKCN2AT2U9> (accessed: 4.04.2021).