

FOREWORD

Research in times of pandemic COVID-19

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The novel coronavirus disease 2019 (COVID-19) continues its march affecting millions of people around the world. The infection began in China in early December 2019 and rapidly spread from a single city to the entire country in just 30 days, creating the conditions for a pandemic.

On 12 May 2020, the John Hopkins Case has reported 4 222 968 confirmed cases globally, with as many as 288 000 related deaths. By the time you read this commentary the numbers will be furtherly increased.

Italy is one of the EU countries with the highest number of patients affected by COVID-19. On 20 February 2020, a 38-year-old Italian man was the first diagnosed positive for COVID-19 at Codogno Hospital, in region of Lombardy, Italy. This date can be considered as the starting date of the Italian epidemic.

There was a worrying surprise for the Italian authorities, while seemingly unconnected cases were emerging in other northern regions – Veneto, Piedmont, Emilia-Romagna, and other areas all over Lombardy. Therefore, strict public health measures were implemented, in the affected municipalities and Regions, to isolate towns in which most of the cases were occurring. On 24 February 2020, sixteen million people were quarantined. Schools and universities as well as shops and factories, except groceries and pharmacies, were closed.

To prevent furtherly the virus diffusion of SARS-CoV-2, the Italian Government introduced progressive mitigation measurements on 9 and 11 March 2020, drastically limiting social interactions, movements of people within the whole territory, and closing all non-essential business activities until 4 May 2020.

Nevertheless, from 20 February to 12 May 2020, 221 216 total confirmed Italian cases and 30 911 deaths

occurred, and 153 doctors and 37 nurses died after caring for patients with COVID-19 (by Protezione civile, Italy).

Some aspects of this crisis can undoubtedly be attributed to plain and simple *mala res* (“bad luck”) that were clearly not under the full control of policymakers. Other aspects, however, could be related to late implementation in recognizing the magnitude of COVID-19, the late organization of a systematic national response to the outbreak and the lack of personal protective devices. National health system’s capacity was effectively stressed to respond to the several needs of all those requiring admission to an intensive care unit.

In hindsight, in an ideal scenario, the spread and effects of the virus should be as standardized as possible across regions and countries and must follow the progression of the virus and its containment at both national and local level.

Other countries appear to be in a situation similar to the Italian one, with just a short time-lag of a couple of weeks. The pandemic continues to rage in Europe and in many other countries. US is today the new epicenter of the COVID-19 epidemic. By the time of this commentary 1 356 037 cases and 81 571 deaths were reported in US, and it is unknown how this pandemic will evolve.

Thirty days after the Italian lockdown and physical distancing, the infection rate has started to slow down. The number of infected subjects, in Northern Italy, is now decreasing as well as the number of patients admitted to the intensive care units. Another encouraging data concerns the increasing number of discharged patients from the hospitals. It is, however, too early to be optimistic and to start with relaxing decisions. The Italian scenario has helped in guiding

many other governments to adopt timely preventive measures for their communities. The results seem to be just as good.

Will life go back to normal after the coronavirus? It seems clear that we have to live with COVID-19 for a long time and, therefore, a strict vigilance against the emergence of new local outbreaks should be maintained at the possible highest levels.

Based on these events, the Editorial Board of *Acta Biomedica* has promoted a special issue on the COVID-19 pandemic. Experienced Scientists in Epidemiology and Public health, Microbiology, Radiology, Pulmonology, Geriatrics, Psychiatry Emergency, Pediatrics and Adolescent Medicine were asked to focus on current knowledge about COVID-19. Also a group of front-line “correspondents” in Italy and outside Italy joined the other scientists. They are Physicians, Researchers, Historians of medicine who have accepted to describe and to report their live experiences on pandemic.

The result is a complete and exhaustive set of ongoing research and interventions aimed to know more about COVID-19 outbreak in different ages and

countries. It is also a contribution for a constructive critical evaluation on what has happened on COVID-19 front, with the hope of a faster, coordinated and effective future interventions.

We believe that collaboration and communication across countries will be more important than ever. Sharing our knowledge and perspectives in a timely manner will be an invaluable weapon to fight together this invisible war.

Acta Biomedica will continue its mission also in the future dedicating a section of the journal, that will be called “*COVID-19 update*” to highlight the efforts of the global scientific community. Contributors covering every aspect of the scientific process development are welcomed.

Acknowledgments

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