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COMMENTARY

The decline of COVID-19-related deaths and the risk of underestimating the pandemic



La diminution des décès liés à la COVID-19 et le risque de sous-estimer la pandémie

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KEYWORDS

COVID-19; Legal Medicine; Mortality; Preventive tools; Public Health **Summary** COVID-19 pandemic has put a strain on the stability of National Health Systems and society itself. The decline in COVID-19-related mortality is positive. However, we do not know the reason for this decline associated with a rise in infection in many countries of the world. For these reasons, this is not the time to lower our guard and excessively reduce preventive strategies against COVID-19.

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MOTS CLÉS

COVID-19; Médecine Légale; Mortalité; Outils de Prévention; Santé Publique **Résumé** La pandémie de COVID-19 a mis à rude épreuve la stabilité des systèmes de santé nationaux et de la société elle-même. La baisse de la mortalité liée aux COVID-19 est positive. Cependant, nous ne connaissons pas la raison de cette diminution associée à une contagion dans de nombreux pays du monde. Pour ces raisons, le moment n'est pas venu de baisser la garde et de diminuer excessivement les stratégies préventives contre le COVID-19.

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COVID-19 has caused, and is still causing, significant problems worldwide. These issues concern both the strictly public health field and the social and bioethical fields [1–9].

In the spring of 2020, most of the world's governments declared a state of health emergency and put in place containment and preventive measures. Rigid public health policies have been favoured by the rapid and exponential increase in infections and deaths COVID-19-related.

At the end of the spring, after many countries had declared the lockdown, most governments relaxed preventive measures. Arrived at the end of the summer, in fact, we are witnessing a slow return to normality with the reopening of schools, reopening of commercial activities and the decrease of various obligations (mandatory mask, social distancing etc).

Recently, COVID-19 infections are starting to increase again [10]. However, despite the increase in infections, the mortality of COVID-19 is decreasing, especially in countries such as Italy, Germany and the USA. It is still unclear why COVID-19 mortality has decreased. There are several possible explanations, but none of these are yet proven and, therefore, only hypothesis remains:

- the increase in diagnostic tests carried out (tampons and serology tests) increased the number of young and asymptomatic infected subjects identified. Thus, the increase in diagnoses would mainly affect individuals who less frequently develop the severe form of Coronavirus Disease 2019;
- mortality has decreased because therapeutic strategies have become more effective;
- virus is adapting and becoming less virulent. So, if so, even if the number of infected increases, the number of serious forms of disease and deaths COVID-19-related decreases.

Obviously, these are only hypotheses, and, to date, there is no definitive scientific evidence to confirm a theory. So, currently, we don't know why the infected/deceased ratio is increasing.

However, the decrease in mortality could lead to the adoption of bad public health choices. In fact, it is believed that has not yet come the time to lower the guard and to weaken the preventive strategies against COVID-19 (for example the mask obligation, social distancing and the use of smart working when possible).

The risk is to encourage a further increase in infections with 2 major public health and bioethical issues.

The first problem concerns the long-term damage that SARS-Cov-2 could cause: the possible long-term damage of COVID-19 is not yet known. Therefore, the increase of infections, even if with few symptoms, could cause an exponential increase of subjects that in the future could develop COVID-related pathological alterations (for example lung tumours, renal alterations etc). Obviously, this could induce a new overload of National Health Systems.

The second problem is the risk that the increase in infections suddenly starts to involve a great number of elderly and debilitated people with new surge in deaths COVID-19-related.

Therefore, in both cases there would be the medicolegal and ethical responsibility of the governments which - without yet knowing the reasons for this reduction in mortality, not having available vaccines or definitive therapies and without knowing the long-term effects of COVID-19 - have decreased the rigidity of preventive public health policies.

It will certainly be important to rekindle the engine of the society and the economy, but it is not ethically acceptable that economic needs exceed health needs. Therefore, it will be essential to maintain high attention and not underestimate the increases in COVID-19 infections otherwise there is a risk that world governments will become accomplices to damage the health of all citizens.

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Disclosure of interest

The authors declare that they have no competing interest.

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