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Short Communication

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Covid-19 on the Alert: The Delay in Question – Commentary

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Abstract

A scientist, who elaborates on the ongoing pandemic, will rarely miss the opportunity to mention an epidemiological principle based on the consensus. As a rule, he adheres, like a majority of his colleagues, to the credo that, if an alarm is given that will lead to a flare-up of COVID-19, a lag of 2-3 weeks will necessarily intervene between the heralding incident(s) and the outburst. The present commentary is meant to find out, whether the above concept may be validated, and if we can determine the nature of these gaps and of their causes.

Keywords: Pandemic; Delay; Consensus; Flare-Up; Mobilization; Knowledge Translation

Introduction

Like any infectious disease, COVID-19 is initiated by the contamination of a person by a variable infective dose of the virus. Infection might ensue, after an incubation period, which varies from 0 to 14 days, with a predilection for a lag of 3 to 5 days. This is valid, to the extent of our understanding of the microbiology of SARS-CoV-2. In addition to the infective dose of the virus, the factors, which are significant in the development of an infectious disease, include an access to the oropharynx, the habitual portal of entry of the virus. A previous exposure to further types of coronavirus might be relevant as well. Moreover, the R0, the viral degree of transmissibility is critical.

So far, we have described the confrontation of an individual with the infective agent. However, the topic of the present discussion regards COVID-19 at the population level. This inquiry is meant to scrutinize a statement that recurs stubbornly, and concerns a delay, considered to come in between an epidemiological event, and the COVID-19 outburst, which had been foreseen. Thus, according to the principle, the incident, which occurs at the level of one or more populations, will precede the flare-up by 2-3 weeks.

Another description of intervals, occurs between the origin of an outburst and the consequent marshalling of the forces that will attempt to confront the disease [1]. Three public health emergencies of international concern, H1N1, Ebola and Zika were involved in this paper. At stake, was the apprehension of the causes of the delays, and of the goal, to improve the handling necessary to reduce the dissemination of viruses [1].

Of the seven hypotheses proposed regarding the impact on the duration of the delays, most were non-contributory [1]. However, the data presented, sustain faster reactions, when dealing with unidentified diseases; when the outburst does not occur during an establishment's vacation; or when US citizens are concerned by the infectious disease [1].

The above findings seem to substantiate a predilection for delayed international rallies, over a postponement, due to an inadequate capacity for controlling the contagion [1]. Another report from China concerned the period between January 13 and January 31, 2020, in which gaps from symptoms onset, via looking for hospital care and ending with publishing a report on the flare-up (including the time requested to amplify the exact nature of the outbreak). The delaying was longer in the Hubai Province, as compared with other areas of Mainland China, or with foreign countries [2].

At a more comprehensive level, the existence of significant gaps through which research inferences are transformed into clinical practice, is the object of another article. The standard of control of patients' health might be impaired, as the above delays might bring about an insufficient use of recent advances and/or an excessive use of archaic knowledge. Nosocomial infections, with their high mortality, represent the group of primary knowledge. It is said that

the above-mentioned gaps might reach as long as 17 years [3].

A large part of the translation period might have been caused by the dissipation of the research funds (some 85% would represent a pure riches loss, funds which may have been used in a more constructive way by translating more knowledge into medical practice). We are dealing with knowledge translation (KT), which is reaching more and more importance, though being far from reaching a consensual agreement [3].

The various policies adapted to KT, include result publication in journals; their presentation at congresses; plain-language summaries; use of mass media; final incentive [3]. Recently, some of the methods have been replaced by art-based KT, including theater-based KT, which seems to be a powerful educational method, as it includes cognitive and affective approaches [3].

Conclusion

The media in Israel during the COVID-19 second wave, often mention the above interval of 2-3 weeks, which distinguish between an epidemiological occurrence (like a cluster of several large weddings in different areas of the country), and the subsequent major increment in severely affected COVID-19 patients. The media will underscore the 3 weeks elapsed between the two events.

In the present commentary, I have attempted to characterize this gap. Among the illustrations presented, some have preceded the present pandemic by two years [1]. Another, all-inclusive example has suggested a negative relevance to the described delay: since it has lasted as long as 17 years, the interval might have hampered the assimilation of multiple scientific discoveries and postponed, often to a significant degree, their translation into a routine of powerful medical practice [3].

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