Collateral damage of the COVID-19 outbreak: expression of concern

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European Journal of Emergency Medicine 2020, **XXX**:000–000

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Received 11 April 2020 **Accepted** 16 April 2020

During the first wave of coronavirus disease 2019 (COVID-19) outbreak, several countries experienced the same phenomenon before being struck: a sudden calm, silence, few patients, quiet halls and less ambulances. Then, when the wave of patients with severe COVID began to strike, these usual emergency patients were still nowhere to be seen. In Europe, as in North America, emergency departments noticed a major decrease of daily visits since the beginning of the outbreak and the implementation of public health measures. The spectacular decrease seems to be a uniform view shared on social media by emergency physicians all around Europe and even overseas in Quebec. While the population abided by the containment measures and hospitals closed most of their elective activities to cope with the anticipated surge in intensive care needs, emergency departments self-emptied.

Some patients may have opted for an alternative pathway for medical care while others may have forgone or postponed their urgent care. As Colineaux *et al.* [1] reported in a large sample of emergency department visits in France, 20% of adult patients were considered severely ill and required emergency care while 62% were intermediate cases who needed urgent care and technical resources. If some reasons for emergency department visits such as trauma have probably decreased due to the lockdown, there is no reason to think that the rate of stroke, myocardial infarction, appendicitis, or seizure have suddenly dropped during these peculiar weeks [2,3]. Based on electronic medical and administrative data systems of 22 hospitals of the eastern part of France, a region that has been struck early and with a high intensity of the COVID wave, we report a decrease of 26% of all emergency department visits, which comprises A DECREASE OF: 34% of strokes, 32% of transitory ischemic attacks, 64% of unstable angina, 42% of appendicitis, and 36% of seizures. In Honk Kong, Tam *et al.* [4] described the care management of a handful of patients with consecutive ST-elevation myocardial infarction (STEMI) after containment measures. When compared to 108 patients with STEMI taken care of in 2019, the authors report an increased delay between symptom onset and first medical contact in 2020. Authors raised concerns that patients may have been reluctant to consult in this particular context and rather postponed healthcare even though their life could be at stake. Emergency physicians should definitely be worried about this collateral damage that the COVID-19 outbreak is generating. Other countries that faced serious infectious disease outbreaks such as Ebola have reported major side effects, such as the diversion of needed care for other diseases and an increased mortality burden that was not attributed to Ebola itself but rather to a stressed and overwhelmed healthcare system [5]. Thus, poor outcomes and unexpected consequences are to be reported beyond the perimeter of the outbreak.

In the COVID-19 context, there may be many reasons that explain why the usual emergency department patients seem to have disappeared despite the fact that all hospitals have managed to keep effective emergency pathways for non-COVID patients. Patients might have developed strategies different from the usual pathways and invested different healthcare resources such as teleconsultation or COVID-free walk-in clinics standing away from usual pathways. These new approaches and trajectories should be analyzed as potential substitutes for part of the usual emergency visits. However, it is unlikely that all the usual emergency department patients have benefitted from those alternatives especially patients with severe illnesses and those requiring emergency settings.

Other suggestions are that patients might have fled emergency departments and waiting rooms because of the anxiety and fear of being infected by SARS_cov2 through patients' or providers' proximity. They might have restrained themselves from looking for any medical advice since all efforts of the healthcare system and public health authorities seem focused on COVID-19 management only. However, since unmet needs are associated with an increased risk of complications and worse

DOI: 10.1097/MEJ.0000000000000717

outcomes [6,7], the quietness of our emergency departments should make us worry and should be considered as collateral damages that were not expected and anticipated during this outbreak and of the consequences of which will emerge in the coming weeks.

That is why we urge emergency physicians and public health authorities to:

(1) Enjoin all patients to seek urgent care when needed and to avoid any delays. This should be expressed loudly and clearly while the outbreak is still ongoing. Patients need to be reassured and should know precisely that a specific COVID-free pathway has been planned in each facility with dedicated resources in order to avoid nosocomial infections.
(2) Engage in the assessment of all collateral damages that were not expected while organizing our departments to fight the outbreak. Efforts should be focused on understanding the reasons that led or compelled non-COVID patients to avoid or delay urgent care. This aspect of the crisis should not be neglected when the post-COVID outbreak report will be formulated.
(3) Find out and describe the new strategies that usual emergency department patients displayed during the outbreak in other settings away from the usual emergency pathways.

In conclusion, we recommend that the huge efforts and research funding that are now focused on the improvement, management, and containment of the COVID-19 outbreak do not avoid describing and analyzing the medical collateral damages that are still in the shadows but will spread when the outbreak subsides.

Acknowledgements

The authors would like to thank the Est rescue Network (Celine Giget, Marc Noizet, MD, Bruno Maire, MD).

A.-L.F.-P. and T.C. supervised data collection. A.-L.F.-P. drafted the manuscript. T.C. and P.G.C. contributed substantially to its revision.

Conflicts of interest

There are no conflicts of interest.

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