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Non-COVID-19 admissions to the emergency department during the pandemic second wave in Italy: What is changed from the first wave?

## Dear Editor,

We recently read with interest the articles written by Baugh et al. [1] and Nourazari et al. [2] regarding a significant decrease in hospital admissions through the Emergency Department (ED) during the COVID-19 pandemic in US. Similarly, many other studies have shown a significant reduction in worldwide ED visits related to different disciplines over the first weeks of the pandemic ("first wave") [3-5]. The general opinion is that patients were avoiding hospitals, because of the fear of being infected with SARS-CoV-2, highlighting both the overuse of EDs by low complexity cases that could be managed by general practitioners and a worrisome tendency to postpone the access to ED when necessary [6]. In particular, in Italy, a reduction of non-COVID-19 services, with subsequent drastic decrease of non-COVID-19 patients' admission to the ED has been noticed [6]. (See Fig. 1.)

When the "first wave" came to an end, the number of cases and daily deaths slowed down to small numbers and the situation overturned: hospitals almost empty of SARS-CoV-2 positive patients and with the common feeling that the nightmare has ended. Suddenly, with the coming of fall, scenario changed again and a continuous growing number of new daily cases was noticed again.

There is no official date to identify the beginning of the COVID-19 "second wave" in Italy. However, the 1st of October 2020 is the day in which for the first time after months two thousand new daily cases were registered.

We compared ED visits in two major referral hospitals in the north of Italy from the 6th September to the 24th October with COVID-19 new daily cases data from the Italian Civil Protection Department [7]. It emerges that the two curves are not mirroring as happened during the "first wave" in the same hospitals, with the non-COVID-19 admissions to the ED showing a progressive slow reduction rather than a collapse.

This slow reduction in admission may be explained by the progress and preparedness in maintaining different path of access to the ED (COVID-19 vs non-COVID-19) and by the decrease fear of COVID-19 in the general population due to the reduction of number and severity of COVID-19 cases during summer as well as the increasing anti-COVID no vax movement.

If in a way is reassuring that patients are not avoiding to get specialist consultation when necessary, on the other hand continuous of non-COVID19 admission to the ED may further weight on already suffering hospitals and healthcare systems if not promptly prepared.





Fig. 1. Non-COVID-19 admissions to the Emergency Department of the two Institutions vs COVID-19 national daily cases.

#### **Declaration of Competing Interest**

None.

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