In-depth, single-centre, analysis of changes in emergency service access after the spread of COVID-19 across Italy

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Dear Editor,

The COVID-19 pandemic started in Italy in February 2020, and in a preliminary report,\textsuperscript{1} we described a significant decrease in visits to our dermatological emergency service (ES) in our institution. Such a reduction was observed both for justified visits (those requiring at least 24 h of hospitalization), while the remaining cases were considered unjustified.\textsuperscript{2}

We speculated whether after 1 year, the pandemic might have caused a change in the use of the dermatological ES, which the current study was designed to address. Two distinct periods were selected: (i) the pre-pandemic period (4 November 2019 to 20 February 2020), and (ii) the same period in the following year (4 November 2020

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to 20 February 2021), which took in government restrictions during the second wave pandemic.

Data on the second wave pandemic were prospectively collected in order to exclude any possible bias related to a retrospective study. Statistical analysis was performed using all the collected data and were analysed with the Mann–Whitney U-test in SPSS software (V26; IBM SPSS, Armonk, NY, USA). P < 0.05 was considered statistically significant.

The total number of patients requiring consultation decreased significantly (P < 0.05) from 1328 in the pre-pandemic period to 483 in the pandemic period (Fig. 1), with a drop from a mean of 110.66 to 40.25 weekly visits in the pandemic period. The number of justified and unjustified emergencies decreased from 418 to 213 (P < 0.05) and from 910 to 270 (P < 0.05), respectively. Interestingly, the percentage of justified visits increased from 31.99% (pre-pandemic) to 45.47% (pandemic). Our data corroborate that previously reported about the misuse of ESs in the Italian national health system.1,3

The global trend of patients requiring ES consultation was also mapped and a trend toward a decline in the number of patients referring to our emergency service was observed (Fig. 1a,b), corroborating literature data.3

These changes in ES visits during the pandemic needs some consideration. The decrease in the global number of patients may have been due to the theoretical risk of infection from COVID-19 during a hospital consultation. The panic generated by the second wave4 may have discouraged people from requiring ES consultation if not urgently necessary. Consequently, the percentage of justifiable access increased from 31.99% in the pre-COVID-19 period to 45.47% in the COVID-19 pandemic. Nevertheless, the number of acute illnesses decreased from 418 to 213 (P < 0.05), suggesting in some instances, even people with acute dermatological conditions may have avoided hospital.

To conclude, our data highlight that a thorough redefinition of ES function is required; for example, increasing the number of outpatient departments for chronic conditions and starting an educational campaign encouraging people to access ES only if their dermatological diseases is acute, in order to ease the pressure on hospitals.

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Every cloud has a silver lining: the environmental benefit of teledermatology during the COVID-19 pandemic
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Dear Editor,
COVID-19 has transformed healthcare delivery globally. The main benefits of teledermatology are reported to be patient convenience and resource efficiency.1 but the environmental benefits of teledermatology have rarely been considered. Our group has previously highlighted the environmental benefit of dermatology outreach clinics.2 We performed a cross-sectional study to assess the environmental benefits of an enforced transition to teledermatology during the first national COVID-19 lockdown in Ireland.

Data relating to teledermatology appointments were collected for the period of national lockdown from 27 March to 29 June 2020. Patient addresses were recorded anonymously from the hospital database. The distance in miles from the patient’s home to the hospital and the estimated duration of the journey in minutes were calculated using mapping software (Google Maps), with distances rounded to the nearest mile. The reduction in CO2 emissions for the journey was calculated using an algorithm endorsed by the Irish Environmental Protection Agency (https://www.carbonfootprint.com/calculator.aspx) and reported in metric tonnes of CO2. Fuel consumption was based on an average car with unknown fuel. Finally, data were gathered from the 2016 census of the Irish Central Statistics Office, (https://data.cso.ie/) and Worldometers (https://www.worldometers.info/world-population) to compare the representation of patients in our catchment area with national figures from Ireland and the UK.

In total, 1476 teledermatology appointments (telephone or video) were held during this period. There were 55 737 miles of car travel saved due to the implementation of teledermatology, an average of 37.8 miles per patient per return trip, equating to a reduction of 15.37 metric tonnes of CO2 over the period of this lockdown (Table 1). This is the carbon equivalent to 16 transatlantic flights (London to New York), 1281 beef steaks or 27 945 takeaway lattes (Fig. 1).3,4,5 The average time saving was 62 min per