

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 justified 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.

T. Ferrari,¹ C. Zengarini,¹ F. Bardazzi^{1,2} and A. Pileri^{1,2}

¹Dermatology, IRCCS Policlinico Sant'Orsola, Via Massarenti 9, Bologna, Italy and ²Dermatology, DIMES, University of Bologna, Via Massarenti 9, Bologna, Italy

E-mail: corrado.zengarini@studio.unibo.it

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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,

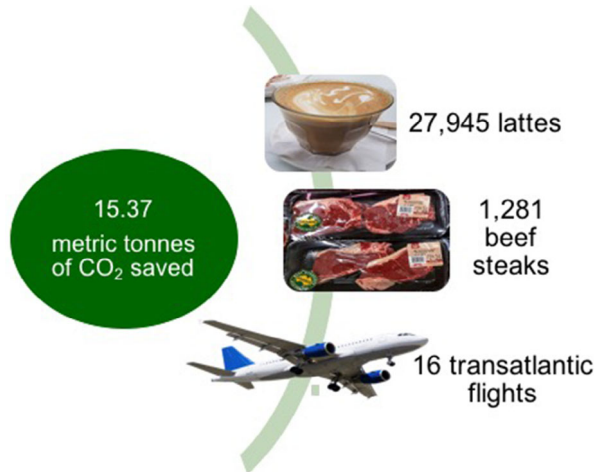
COVID-19 has transformed healthcare delivery globally. The main benefits of teledermatology are reported to be patient convenience and resource efficiency,¹ but the environmental benefits of teledermatology have rarely been considered. Our group has previously highlighted the environmental benefit of 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

Table 1 Reduction in travel distance, travel time and carbon emissions over the national lockdown from 27 March to 29 June 2020.

Parameter	Result
Total teledermatology appointments, <i>n</i>	1476
Average distance of return trip per patient, miles	37.8
Average travel time of return trip per patient, min	62
Total travel distance saved, miles	55 737
Total reduction in carbon emissions, metric tonnes	15.37

**Figure 1** Summary of the reduction in carbon footprint in our department due to implementation of teledermatology clinics from 27 March to 29 June 2020 (average latte = 0.55 kg CO₂, average 200 g beef steak = 12 kg CO₂, average round trip from London to New York by plane = 986 kg CO₂).

round trip. Our regional catchment area (Cork and Kerry) is a largely rural area, with an urban to rural population ratio of 1.32 : 1, compared with an Irish national ratio of 1.7 : 1 and a UK national ratio of 4.96 : 1 (Table 2).

The Lancet Commission on Health and Climate Change stated that 'climate change is the greatest global health threat of the 21st century', with air pollution acknowledged as 'the single largest environmental health risk in Europe' by the European Environment Agency. This study highlights a significant reduction in carbon emissions following the wholesale adoption of teledermatology during the first period of national lockdown. It also shows the considerable time saving afforded to patients by implementing teledermatology.

The limitations of the study include the assumption of travel by car, some imprecise addresses (rural townlands over a large area) and failure to capture nonattendance rates, which may differ between physical visits and teledermatology consultations. While our catchment area has a similar urban/rural ratio as the Irish national figures, a much higher proportion of patients in the UK reside in urban locations, where travel distances may be shorter and public transport may be more readily available.

Table 2 Breakdown of urban and rural populations nationally and in our catchment area, and urban/rural ratios.

Parameter	Region		
	UK	Ireland	Cork/Kerry
Urban population, <i>n</i>	56 495 180	3 111 336	392 778
(%)	(83.2)	(63)	(56.9)
Rural population, <i>n</i>	11 390 831	1 826 450	297 797
(%)	(16.8)	(37)	(43.1)
Urban/rural population ratio	4.96 : 1	1.7 : 1	1.32 : 1

As dermatology departments attempt to build back better following the COVID-19 pandemic, the environmental benefits of teledermatology should be factored into service redesign.

G. O'Connell,¹ C. O'Connor^{1,2} and M. Murphy^{1,2}

¹Department of Dermatology, South Infirmary Victoria University Hospital, Cork, Ireland and ²Department of Medicine, University College Cork, Cork, Ireland

E-mail: drcathalocconnor@gmail.com

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Mucosa-predominant pemphigus vulgaris with anti-desmocollin 2 and 3 antibody positivity and ocular symptoms

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Dear Editor,

A 24-year-old Japanese woman presented with redness of her eyes, along with pain and inflammation in her mouth