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**COVID-19: Important Updates and Developments**  
 Edited by Franco Rongioletti, MD, and Leonard J. Hoenig, MD

# Survey to evaluate the patient experience of virtual telephone consultations during the COVID-19 pandemic<sup>☆</sup>



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The COVID-19 pandemic has resulted in significant morbidity and mortality and devastated health care systems around the world.<sup>1</sup> Public health guidance advocating social distancing means that alternative models of delivering health care are required to reduce footfall and face-to-face consultations to minimize the spread of contagion.<sup>2</sup> Our dermatology department is based within the United Kingdom National Health Service and serves a population of 630,000 people. After lockdown, we had to rapidly convert face-to-face consultations to telephone appointments, while concurrently developing a teledermatology service. We sought to capture the patient experience and outcomes of telephone consultations through performing a patient survey.

Patients were eligible for the survey if they received a telephone consultation between June 1 and June 5, 2020. A resident, who was not part of the direct care team, phoned the patient at least 48 hours after their telephone appointment to participate in the survey. If patients agreed, a survey proforma was completed. All patients had a confirmed dermatologic diagnosis from a previous clinic visit and were called

to assess the status of their condition. An example included a patient with plaque psoriasis, stable on oral methotrexate, who had no side effects or disease flare along with a recent satisfactory blood test result.

## The survey

In total, 60 patients completed the survey, with a response rate of 92%. Demographics and clinical characteristics are outlined in [Table 1](#). The mean age of participants was 54.4 years and 62% of participants were female. The majority of patients were recruited from general clinics (73%), with the remaining from specialist clinics. The most common dermatologic diagnoses were psoriasis (32%), atopic dermatitis (18%), and nonmelanoma skin cancer (10%). Virtual telephone consultations were conducted by a range of health care professionals, including attending physicians (50%), residents/interns (38%), and nurse practitioners (12%).

[Table 2](#) outlines the outcomes for patients who received a telephone consultation. Overall, 93% of patients were very satisfied or satisfied. One subject was dissatisfied and reported feeling confused after the phone consultation. All patients were happy to discuss medical problems over the telephone. A small proportion of patients were requested to attend the hospital for further investigations (15%) or were issued a prescription (17%) after the telephone consultation. One patient was asked to forward an image of the eruption, electronically. There were no urgent face-to-face consulta-

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**Table 1** Patient demographics and dermatologic diagnoses

<b>Total number of subjects (men/women)</b>			60 (23/38)
<b>Mean age (min-max), y</b>			54.4 (19-93)
<b>Type of dermatology clinic</b>			<b>Numbers of patients</b>
General			44
Complex psoriasis			6
Skin cancer			4
Vulval			3
Hyperhidrosis			3
<b>Caller grade</b>			
Physician			30
Resident			20
Intern			3
Nurse practitioner			7
<b>Dermatologic diagnosis</b>			
Psoriasis	19	Melanoma	2
Atopic dermatitis	11	Actinic keratosis/Bowen's disease	2
Non-melanoma skin cancer	6	Cutaneous lupus	1
Lichen sclerosus	3	Rosacea	1
Hyperhidrosis	3	Other*	12

\* Other diagnoses included the following: 3 × hidradenitis suppurativa, morphea, bullous pemphigoid, sclerodermatomyositis, hidradenocarcinoma, idiopathic hyper eosinophilia, nodular prurigo, lichen planopilaris, and panniculitis.

**Table 2** Teledermatology consultation outcomes and patient satisfaction (total N = 60)

Survey question	Yes	No				
Were you happy to discuss medical problems over the telephone?	60	0				
Did the telephone consultation address your concerns?	54	6				
Did the telephone consultation lead to photography and further electronic communication?	1	59				
Did the telephone consultation result in a face-to-face consultation?	0	60				
Did the telephone consultation lead to a prescription?	10	50				
After the telephone consultation did you have to visit the hospital for further investigations?	9	51				
Would you be happy if some of your future appointments were converted to telephone consultations?	46	14				
Overall, how satisfied were you with the telephone consultation?	0	1 (1.7%)	3 (5%)	5 (8.3%)	51 (85%)	
		Very dissatisfied	Dissatisfied	Indifferent	Satisfied	Very satisfied

tions as a result of the telephone appointment. The majority of patients (78%) supported future telephone consultations.

## Discussion

The global COVID-19 pandemic has brought challenges to the way dermatology services are delivered, while offering opportunities to deliver novel approaches to patient care. Our survey has shown that patients are comfortable with the remote telephone consultation format and, in the majority of cases, would welcome its use beyond the pandemic. Only a small number of patients were required to attend the hospital after telephone consultation, and the clinician workload was not significantly increased. In addition, the dermatology team was content with this new patient consultation service.

There are limitations to telephone consultations, as dermatology is both a visual and tactile specialty. There are

potential concerns around privacy and confidentiality with photography and electronic communications.<sup>3</sup> In our department, telephone consultations have been especially useful for the management of patients with chronic conditions and who are stable on treatment.

Lack of visualization meant that it was ill-suited to skin cancer clinics. Our findings complement those of a recent study from Yale, whereby a teledermatology service was amenable to common dermatoses, for example, atopic dermatitis and acne vulgaris, with full skin examinations being less suitable for this consultation modality.<sup>4</sup>

Another recent study from China has shed light on some of the pitfalls with telephone consultations for patients with dermatomyositis.<sup>5</sup> In the Chinese study, adjustments to treatment regimens caused undesired side effects including liver function test derangement and leg edema. An unwanted degree of psychological distress was noted in patients concerned about disease progression, particularly in those with associated malignancy or interstitial lung disease. A face-to-

face consultation was required in 65% of patients; however, no patient desired a further telemedicine consultation.

The differences observed between the telephone consultation model and the video teledermatology service in the Yale study may reflect the different dermatoses surveyed. It could also reflect a cultural difference in acceptance of a telemedicine consultation model.

## Conclusions

A limitation of our study may be that the review of the telephone consultation spanned a short time frame of 5 days, with a resultant relatively small sample size of 60 patients. It is possible that a larger sample size may have highlighted more dissatisfaction. Conversely, it may have further confirmed high satisfaction with telephone clinics. As the pandemic progresses, telephone consultations have become a useful adjunct in the management of dermatology patients while infrastructure is developed for more advanced teledermatology.

## Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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