

## Correspondence

### Impact of the COVID-19 pandemic on Colombian dermatology residents: results from a nationwide survey

Dear Editor,

The decrease in demand for the dermatology specialty has been documented in several countries during the COVID-19 era. As of December 9, 2020, 1,384,610 confirmed cases have been reported in Colombia with 38,158 related-deaths and 10,731 recovered patients (source: <https://www.ins.gov.co/Noticias/paginas/coronavirus.aspx>).

As health care delivery has been transformed during the COVID-19 pandemic and given that adequate resident training has faced several challenges, in this nationwide survey we aimed to explore the impact of COVID-19 pandemic among Colombian dermatology residents.

A 50-question web-based survey with no personal identifiers was sent to all Colombian dermatology residents on August 20, 2020. The survey was closed on September 2, 2020.

One-hundred twenty-two dermatology residents responded to the survey (response rate: 92.4%). The demographic characteristics of responders are depicted in Table 1.

Before the pandemic, 92% of Colombian residents reported to work 5 days a week, compared to 24% still working 5 days per week during the pandemic. The majority of residents (77%) used to attend between 50 and 150 patients per week before the pandemic, compared to 43% not attending any, and 38% attending less than 40 patients per week. In addition, the percentage of residents performing any surgical skin procedure decreased dramatically during the pandemic compared to before (85% vs. 0.8%).

Telemedicine dermatology consultations increased from 5 to 84% during the pandemic. Also, when polled if virtual learning had a negative impact in their academic training, the answers were "No": 44%, "Does not know": 21%, and "Yes": 34%. Also, the majority of residents (90%) reported to be partially or totally overloaded with the huge amount of non-peer reviewed information they received during the pandemic, and in 82% of the residents, at least one psychiatric illness was triggered among them (Table 2).

Personal protective equipment (PPE) was provided by their university, health provider institution, labor risks insurance, by themselves, or by their hospital in 58, 17.3, 14, 9, and 1.7%, respectively.

Few studies have reported the impact of COVID-19 on dermatology residency.<sup>1</sup> In this study, we determined the magnitude of the impact of COVID-19 on Colombian dermatology residents.

Our dermatology residents have been highly impacted by COVID-19 with the suspension of clinical activities which were replaced by telemedicine, and the very few face-to-face consultations were focused just on urgent or hospitalized patients. Similar to what has been published, such a situation has caused either uncertainty in some of them (21%) or negative feelings in others (34%).<sup>2</sup>

This study is highly disturbing in that 82% of our dermatology residents reported at least one mental disorder, behavioral

**Table 1** Demographic characteristics of responding residents

Variable	Frequency	Percentage %
Age		
20–25 years old	7	5.7
26–30 years old	84	68.9
31–36 years old	25	20.5
37–42 years old	5	4.1
43–48 years old	1	0.8
Gender		
Female	94	23
Male	28	77
Year of residency		
1st year	33	27
2nd year	34	27.9
3rd year	55	45.1
Residency program		
Universidad Militar (Bogotá, Colombia)	7	5.7
Fundación Universitaria Ciencias de la Salud (Bogotá, Colombia)	24	19.7
Universidad Javeriana (Bogotá, Colombia)	11	9.0
Universidad Nacional (Bogotá, Colombia)	10	8.2
Universidad El Bosque (Bogotá, Colombia)	14	11.5
Fundación Universitaria Sanitas (Bogotá, Colombia)	4	3.3
Universidad Libre (Cali, Colombia)	13	10.7
Universidad del Valle (Cali, Colombia)	10	8.2
Universidad Pontificia Bolivariana (Medellín, Colombia)	5	4.1
Universidad CES (Medellín, Colombia)	12	9.8
Universidad ICESI (Medellín, Colombia)	2	1.6
Universidad de Antioquia (Medellín, Colombia)	4	3.3
Universidad de Cartagena (Cartagena, Colombia)	2	1.6
Universidad de Caldas (Manizales, Colombia)	4	3.3

**Table 2** Psychiatric disorders triggered during the pandemic

Psychiatric/behavioral/emotional disorders triggered during the pandemic	Frequency	Percentage %
None	22	18.0
Anxiety, stress, and insomnia	13	10.7
Anxiety and stress	12	9.8
Anxiety, stress, and irritability	12	9.8
Anxiety alone	11	9.0
Anxiety, stress, irritability, insomnia, and depression	9	7.4
Stress and irritability	8	6.6
Stress alone	7	5.7
Anxiety, stress, irritability, and depression	5	4.1
Irritability and insomnia	4	3.3
Anxiety and depression	4	3.3
Anxiety and irritability	3	2.5
Anxiety, stress, and irritability	3	2.5
Anxiety and insomnia	3	2.5
Anxiety, stress, and depression	2	1.6
Insomnia alone	2	1.6
Stress, irritability, and insomnia	2	1.6
Total	122	100%

change, or emotional distress during this crisis, a finding that has been reported in other trainee residents.<sup>3,4</sup> In addition, the uncertainty feelings could also be explained by infection control protocols, by the huge amount of COVID-19 circulating information, and the fear either of contracting the virus or of infecting family and friends, as has been reported previously.<sup>5</sup>


Fortunately, only 3.3% of the residents tested positive for COVID-19, and the majority of PPEs were supplied by the university. However, it is still worrying that 9% of the residents have had to buy them themselves.


The main limitation of our study is that it is only a “snapshot” of a rapidly evolving situation, but on the other hand, the strength of this study is that it adds knowledge to the scarcity of available literature regarding the effects of the pandemic on dermatology residents. The identification of such disturbances is very relevant in all dermatology departments as it adds supported data in order to better adapt dermatology services and training according to the current circumstances and might serve

as a prelude to an in-depth discussion of possible solutions to resultant training gaps and emotional/behavioral/psychiatric illnesses of trainees.

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