

Clinical profile and response to treatment of patients with psoriasis seen via teledermatology during the COVID-19 pandemic in the Philippines



To the Editor: Psoriasis is a chronic disease that requires long-term follow-up. The COVID-19 pandemic has prompted us to increase the use of teledermatology (TD) to care for our patients with psoriasis. We conducted a descriptive cross-sectional study of our patients with psoriasis seen via TD during the pandemic, describing their demographic and clinical profile and evaluating their response to treatment.

We reviewed 424 charts of patients with psoriasis seen via TD who had new-onset psoriasis flareup and who had a follow-up at 1 month. The study

Table I. Demographic and clinical profile of patients with psoriasis seen via teledermatology in Rizal Medical Center

Characteristics	Mean (SD) or frequency (%) n = 424
Age, y	34 (SD, 13)
0-18	34 (8%)
19-30	144 (34%)
31-40	118 (28%)
41-50	69 (16%)
51-60	39 (9%)
>60	20 (5%)
Sex	
Male	159 (38%)
Female	265 (63%)
Type of patient	
New	221 (52%)
Returning	203 (48%)
Method of diagnosis	
Clinical	399 (94%)
Histologic	25 (6%)
Disease severity*	
Mild	171 (40%)
Moderate	216 (51%)
Severe	27 (9%)
Subtype by morphology	
Plaque	367 (87%)
Guttate	31 (7%)
Erythrodermic	17 (4%)
Pustular	9 (2%)

Continued

Table I. Cont'd

Characteristics	Mean (SD) or frequency (%) n = 424
Subtype by location	
Scalp	237 (56%)
Face	27 (6%)
Palmoplantar	7 (2%)
Inverse	7 (2%)
Genital	3 (1%)
Nail finding	
Present	209 (49%)
Absent	215 (51%)
Psoriatic arthritis	
Present	77 (18%)
Absent	347 (82%)
With cardiovascular comorbidity	69 (16%)
Hypertension	30 (7%)
Overweight/obesity	24 (6%)
Diabetes/prediabetes	14 (3%)
Dyslipidemia	1 (0.2%)
With noncardiovascular comorbidity	2 (0.5%)
Liver disease	1 (0.2%)
Kidney disease	1 (0.2%)
Reported trigger [†]	
None	127
Non-lifestyle factor	
Mental stress	195 (46%)
Changes in weather	56 (13%)
Discontinuation or lack of medication	44 (10%)
Infection	43 (10%)
Trauma	2 (0.5%)
Lifestyle factor	
Poor sleep	23 (5%)
Overeating	6 (1%)
Smoking	6 (1%)
Alcohol intake	4 (1%)
No exercise/sedentary lifestyle	1 (0.2%)
Treatment	
Monotherapy	191 (45%)
Topical corticosteroid	131 (31%)
Topical vitamin D analog	46 (11%)
Methotrexate	9 (2%)
Secukinumab	4 (0.9%)
Cyclosporine	1 (0.2%)
Combination therapy	233 (55%)
Topical + methotrexate	118 (28%)
Topical corticosteroid + vitamin D analog	108 (25%)
Topical + secukinumab	4 (0.9%)
Topical + cyclosporine	3 (0.7%)

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*Assessed using psoriasis area severity index and dermatology life quality index.

[†]Each patient can have more than 1 reported trigger.

Table II. Psoriasis area severity index and dermatology life quality index at baseline and after 1 month of treatment

Disease severity	PASI Mean (SD)			DLQI Mean (SD)		
	Baseline	After 1 mo	% decrease	Baseline	After 1 mo	% decrease
Mild	6.42 (4.52)	5.17 (4.21)	19%	10.94 (7.31)	9.76 (6.94)	11%
Moderate	16.03 (8.37)	12.85 (7.39)	20%	16.59 (7.54)	14.41 (8.15)	13%
Severe	27.2 (12.33)	20.1 (12.13)	26%	18.83 (6.14)	15.51 (7.89)	18%

DLQI, Dermatology life quality index; PASI, psoriasis area severity index.

duration was from October 2020 to April 2021. [Table I](#) shows the demographic and clinical profile of the cohort. Treatment response was evaluated by comparing the psoriasis area severity index (PASI) and dermatology life quality index (DLQI) at the time of new-onset flareup and at follow-up at 1 month ([Table II](#)). Mean PASI and DLQI decreased from the baseline to follow-up. PASI and DLQI reduction was the highest for severe disease, 26% and 18%, respectively. Moderate psoriasis had a 20% and 13% reduction, respectively, whereas mild disease had a 19% and 11% reduction, respectively, in PASI and DLQI.

Our study provides real-world data on the use of TD to care for patients with psoriasis during the pandemic. It is noteworthy that our patients were younger than those of 2 registry-based studies, the study by Ng et al¹ before the pandemic and the study by Mahil et al² during the pandemic, which had a mean age of patient of 44 years (SD, 16 years) and 47.2 years (SD, 15.1 years), respectively. It is possible that younger patients are more adept at using technology than older patients and may explain the greater number of patients aged <40 years in our study. We recommend a study on TD utilization patterns and feedback to help older patients keep abreast of technology.

Forty-six percent of our patients reported mental stress as a trigger of the disease flareup. This may be attributed to the effects of the pandemic, which has restricted mobility, caused the loss of income, and has led to stress, anxiety, and depression.³ We encourage psychosocial support for these patients.

The reduction in PASI and DLQI in our patients across all severity groups suggests that TD is a useful alternative in caring for patients with psoriasis, especially in this pandemic. In our institution, we use hybrid TD because most of our patients do not have a reliable internet connection, which precludes good-quality video conferencing. Hybrid TD allows us to better assess the condition through photographs sent via the Facebook messenger (store-and-forward TD) combined with a telephonic call (real-time interactive TD) to review patients' clinical history

and explain management. We use the Facebook messenger because it is accessible to most patients, including those from resource-poor regions. Similarly, Angeles et al⁴ reported that most dermatologists in the Philippines use hybrid TD, with the Facebook messenger as the second most commonly used platform.

Limitations of our study include the lack of a control group and long-term follow-up. To validate our findings, we recommend including a cohort of patients with psoriasis seen in-office as a control group and including long-term follow-up assessments in future studies.

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Conflicts of interest

Dr Tinio has received honoraria as a member of the advisory board and speaker from Novartis, Janssen/J&J, and Zuellig Lilly. Dr Chavez has received fees as a speaker from LeoPharma and Glenmark and a research grant paid to her institution as principal investigator from Glenmark. Dr Balagat has received fees as a speaker from Novartis. Dr

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