



Internet and Social Media Use Among Patients with Hair and Scalp Disorders: A Behavioral Analysis

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Key words: Seborrheic dermatitis, Telogen effluvium, Traction alopecia, Social media, TikTok

Citation: Coulanges E, Olagun-Samuel C, Thomas J, Adotama P. Internet and Social Media Use Among Patients with Hair and Scalp Disorders: A Behavioral Analysis. *Dermatol Pract Concept*. 2026;16(1):5755. DOI: <https://doi.org/10.5826/dpc.1601a5755>

Accepted: June 18, 2025; **Published:** January 2026

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Funding: None.

Competing Interests: None.

Authorship: All authors have contributed significantly to this publication.

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ABSTRACT Introduction: TikTok, a social media platform, is a tool for disseminating dermatological public health education. On TikTok, like other social media platforms, both board-certified dermatologists and non-medical providers (“influencers”) provide dermatological advice, but how the quality of the advice compares between the two creator groups is unclear.

Objectives: This study sought to assess similarities and differences in the language used within content, user receptibility, and engagement and the utility of online education in understanding hair and scalp disorders.

Methods: A cross-sectional analysis of 97 TikTok videos from 2023 was performed to evaluate the content quality of videos made by dermatologists and influencers regarding three common hair and scalp disorders: seborrheic dermatitis, telogen effluvium, and traction alopecia.

Results: Dermatologists and influencers had similar user engagement, but 49% of dermatologists were more likely to recommend standard treatments compared to 27% of influencers; 46% of influencers were more likely to recommend alternative treatment options compared to 25% of dermatologists. An analysis of user comments to assess audience understanding indicated that the three disorders were often confused with at least 2–3 other similar hair and scalp conditions.

Conclusions: This study highlights a need to clarify for patients the standard of care for common hair and scalp disorders. This study also identified a universal lack of messaging encouraging users to seek in-person medical attention for their dermatological concerns.

Introduction

Digital platforms are popular tools for public health education and increase patient-provider engagement [1]. Over 75% of individuals engage in online health-seeking behavior because of its cost-effectiveness and anonymity [2]. TikTok, a social media platform specializing in short-form video content, boasts a high monthly usage of nearly 24 hours amongst Americans ages 16 to 64 [3]. Short-form content renders itself a useful form of education, allowing patients to find content relevant to their own conditions in an easy-to-digest format.

While more than 80% of Americans experience conditions of or related to the skin, only 40% visit a dermatologist for annual skin checks due financial and insurance constraints or limited access to dermatologists [4]. Despite social media's use as a forum for health education and communal support, boundaries between validated and non-validated educational sources are blurred [5]. No credential disclosure is required to post dermatology-related content, and information sources can range from board-certified dermatologists and licensed trichologists to self-proclaimed hair experts and influencers. A 2020 study indicated board-certified dermatologists accounted for 4% of accounts with dermatology content in 2024 [6], leaving concerns surrounding the credibility and accuracy of dermatology content on social media.

Objectives

This study sought to evaluate the quality of TikTok content created by dermatologists and non-medical providers ("influencers"), focusing on three common hair and scalp disorders: seborrheic dermatitis, traction alopecia, and telogen effluvium. We assessed the similarities and differences in the language used within content, user receptibility, and engagement and the utility of online education in understanding hair and scalp disorders.

Methods

A cross-sectional analysis was performed for TikTok videos discussing seborrheic dermatitis, traction alopecia, and telogen effluvium between January 1, 2023 and December 31, 2023. Each condition was searched from the perspective of a TikTok user using symptom descriptors, excluding the condition name itself (Table 1). Videos were categorized by creator type: board-certified dermatologist or influencer, according to the creator's biography. Influencers included trichologists, hair stylists, barbers, licensed cosmetologists, and hair influencers. Multiple videos from the same creator were included. Recurrent videos from different search terms were counted once. Videos were

stratified by condition and analyzed based on content and audience engagement ("likes" and comments). Two-tailed t-tests were used to analyze user engagement, and chi-square analyses were used to analyze video quality and user response.

Results

Content

Ninety-seven TikTok videos were analyzed (41 from dermatologists, 56 from influencers). Compared to influencers, dermatologists had a significantly higher average follower count, 590,345 versus 232,032 ($t(95) = 3.397, P=0.001$). The number of likes (13,773 vs. 11,925) and comments (157 vs. 112) between dermatologists and influencers were similar ($t(95)=0.7965, P>0.05$ and $t(95)=0.4733, P>0.05$, respectively). However, for referral behaviors, 20% of dermatologists recommended patients seek medical help from either a dermatologist, medical provider, or hair professional, while 11% of influencers mentioned referral to a professional. A chi-square test of independence showed no significant difference in referral behavior between the two content creator groups ($\chi^2(1)=0.86, P=0.355$). Both creator groups were similar in naming and describing the diagnosis; 33 dermatologists versus 42 influencers named the diagnosis ($\chi^2(1)=1.67, P=0.65$), and 33 dermatologists versus 42 influencers described the diagnosis ($\chi^2(1)=0.41, P=0.94$). Treatment practices varied significantly between dermatologists and influencers: 49% of dermatologists were more likely to suggest standard treatment, while 46% of influencers were more likely to suggest alternative treatments ($\chi^2(2)=6.271, P=0.043$).

User Comments

The content analysis revealed key differences in treatment recommendations and referral behaviors between dermatologists and influencers. An analysis of viewer responses indicated that of the 12,669 comments across all 97 videos, 389 comments listed a treatment option that aligned with evidence-based practices, and 237 comments listed alternative treatments emphasizing vitamin supplementation, low-processed diets, natural hair products, and minimizing hair manipulation. Only 31 comments mentioned seeking help from a professional: 25 comments either sought help from a dermatologist or referred another user to seek out a dermatologist. The other six comments mentioned seeking help from a general practitioner or hair professional. Of the comments that demonstrated help-seeking behaviors, dermatologists were mentioned significantly more ($\chi^2(2)=12.597.2, P<0.05$), but overall, seeking help was mentioned less than 1% of the time.

Table 1. Search phrases per skin condition.

Search Phrases	Videos (N)	Source: Dermatologists	Source:
		(%)	Non-Dermatology Providers (%)
Seborrheic dermatitis			
Beard dandruff	15	33%	67%
Dandruff	15	27%	73%
Dandruff dermatologist	6	83%	27%
Flaky skin	3	33%	67%
Greasy flaky scalp	6	50%	50%
Treating dandruff	2	-	100%
Telogen effluvium			
Hair loss	2	50%	50%
Hair shedding	6	50%	50%
PCOS hair loss	4	-	100%
Perimenopausal hair loss	2	-	100%
Postpartum hair loss	6	83%	17%
Traction alopecia			
Braids and hair loss	1	100%	-
Hair loss from tight hairstyles	14	36%	64%
Hair loss perimeter	1	100%	-
Hairstyles and hair loss	2	100%	-
Tension alopecia	4	75%	25%
Tension hair loss	5	20%	80%
Thinning edges	3	33%	67%

Discussion

Although the dermatologists and influencers used similar descriptive language and identifying similar triggers for each condition, users' misconceptions surrounding diagnoses and appropriate therapies persisted. Users often misidentified conditions or incorrectly assumed that treatments for similar conditions applied to the condition discussed. Seborrheic dermatitis was mistaken for scalp psoriasis, dry scalp, eczema, and lice; telogen effluvium for androgenetic and traction alopecia; and traction alopecia for telogen effluvium or other forms of alopecia, specifically androgenetic and cicatricial alopecia.

Alternative Treatments

Influencers promoted alternative treatments more often than did dermatologists, who opted for evidence-based practices. Traction alopecia alternative treatments underscored eliminating factors that increase susceptibility to hair loss, including reducing hair manipulation and hairstyles that cause trauma to hair follicles. Frequently stated alternatives for seborrheic dermatitis were apple cider vinegar, aloe vera, coconut oil, and rosemary oil, the latter mentioned for all three hair conditions. Between creators and users, rosemary oil and vitamin supplementation were the only alternatives mentioned for telogen effluvium. Additionally, many influencers emphasized the following behavioral modifications: stress

management, diet (e.g., mercury-containing fish and nutritional supplements like biotin and riboflavin), sleep, and exercise. Though the role of dietary changes in managing hair disorders is underexplored, lifestyle modifications hold potential value. In this regard, influencers may be correct in advocating for these approaches as part of a holistic treatment strategy [7].

Treatment Discordance

Among board-certified dermatologists and influencers, contradictory information existed surrounding hair oils for treating seborrheic dermatitis. Because seborrheic dermatitis is caused by the *Malassezia* yeast, which thrives in sebum-producing areas of the skin, treatment includes topical antifungals and corticosteroids. Patients are advised against applying hair oils such as castor and coconut oils directly onto the scalp, especially with textured hair, which may impede sebum from travelling down the hair shaft and leads to oil build-up on the scalp [8].

Referrals to Dermatologists

Influencers and dermatologists had limited referral behaviors overall. Few videos mentioned seeking medical care, and few viewers indicated seeking medical advice for the conditions described. To minimize misinformation and provide patients with accurate medical advice, video content created by both dermatologists and influencers should also encourage users to seek professional medical advice from a dermatologist.

Limitations

This study was limited by its small sample size and by the uneven video distribution per diagnosis. Certain diagnoses had fewer original videos when searched by descriptor terms. Due to limited search terms, the resulting videos may be limited in scope. We must also consider the variability of TikTok's algorithm. However, to minimize algorithmic bias, videos were reviewed based on search terms until exhaustion.

Conclusion

Board-certified dermatologists and influencers are at the forefront of dermatological education on TikTok. There is an increased need for content directing patients to seek licensed medical help for solutions to dermatological concerns. As patients frequent these platforms, it is important to clarify the standard of care while minimizing the dissemination of medical misinformation. It is also important to underscore when conditions warrant medical attention and to avoid possible misconceptions.

References

1. Fu J, Li C, Zhou C, et al. Methods for Analyzing the Contents of Social Media for Health Care: Scoping Review. *J Med Internet Res*. Jun 26 2023;25:e43349. DOI: 10.2196/43349. PubMed PMID: 37358900.
2. Berle D, Starcevic V, Khazaal Y, Viswasam K, Hede V, McMullan RD. Relationships between online health information seeking and psychopathology. *Gen Hosp Psychiatry*. Jan-Feb 2020; 62:96-97. DOI: 10.1016/j.genhosppsych.2019.04.006. PubMed PMID: 31029463.
3. Kemp S. Digital 2023: Global Overview Report. Kepios. Accessed October 1, 2024. <https://datareportal.com/reports/digital-2023-global-overview-report>
4. New Survey Shows 80 Percent of Adults Experience Skin Concerns, Yet Less than Half Visit a Dermatologist Annually. PR Newswire; July 2, 2024, 2024. Accessed October 1, 2024. <https://www.prnewswire.com/news-releases/new-survey-shows-80-percent-of-adults-experience-skin-concerns-yet-less-than-half-visit-a-dermatologist-annually-302188106.html#:~:text=New%20Survey%20Shows%2080%20Percent,Half%20Visit%20a%20Dermatologist%20Annually%C2%B9>
5. Wong XL, Liu RC, Sebaratnam DF. Evolving role of Instagram in #medicine. *Intern Med J*. Oct 2019;49(10):1329-1332. DOI: 10.1111/imj.14448. PubMed PMID: 31602768.
6. Ranpariya V, Chu B, Fathy R, Lipoff JB. Dermatology without dermatologists? Analyzing Instagram influencers with dermatology-related hashtags. *J Am Acad Dermatol*. Dec 2020;83(6):1840-1842. DOI: 10.1016/j.jaad.2020.05.039. PubMed PMID: 32416205.
7. Sardana K, Sachdeva S. Role of nutritional supplements in selected dermatological disorders: A review. *J Cosmet Dermatol*. Jan 2022;21(1):85-98. DOI: 10.1111/jocd.14436. PubMed PMID: 34564936.
8. Mayo T, Dinkins J, Elewski B. Hair Oils May Worsen Seborrheic Dermatitis in Black Patients. *Skin Appendage Disord*. Mar 2023;9(2):151-152. DOI: 10.1159/000527778. PubMed PMID: 36937158.