ARC Journal of Dermatology
Volume 9, Issue 1, 2026, PP 12-20
ISSN No. (Online) 2456-0022
DOI: https://doi.org/10.20431/2456-0022.0901002
www.arcjournals.org

Tiktok-Driven Self-Treatment of Perioral Dermatitis with Over-the-Counter Corticosteroids: Clinical, Public Health, and Equity Implications

Amber Sun[1*], Kaitlin Driesse[2], Pearly Trivedi[3], Sravya Valiveti[4], Shivani S. Ambardekar[5], Michael Sun[6], Katherine Geric[7]

[1]*Hofstra University, Hempstead, NY*

[2]*Michigan State University College of Human Medicine, East Lansing, MI*

[3]*Nova Southeastern University, Davie, FL*

[4]*St. George's University School of Medicine, St. George's, Grenada*

[5]*University of Illinois at Chicago, Chicago, IL*

[6]*State University of New York Upstate Medical University, Syracuse, NY*

[7]*Ascension St. Vincent Hospital, Indianapolis, IN*

Received: 20 January 2026 Accepted: 05 February 2026 Published: 19 February 2026

[*]**Corresponding Author:** ***Amber Sun,*** *Hofstra University, Hempstead, NY*

Abstract: *Perioral dermatitis (POD) is a chronic inflammatory facial dermatosis characterized by erythematous papules, scaling, and periorificial distribution, frequently exacerbated by inappropriate topical corticosteroid use. The rise of TikTok as a primary health information source has fueled a concerning trend of self-diagnosis and self-treatment of POD with over-the-counter corticosteroids, often without medical supervision or risk understanding. The algorithm-driven amplification of anecdotal skin care content, coupled with influencer promotion of "quick fixes," has contributed to widespread dissemination of misinformation regarding the role of corticosteroids in managing facial rashes. Many individuals, particularly adolescents and young adults, turn to videos instead of dermatologic consultation, resulting in short-term symptomatic relief followed by worsening rebound flares, corticosteroid addiction, or progression to steroid-induced dermatitis. The easy availability of low- and medium-potency corticosteroids in pharmacies, combined with limited regulation of online dermatologic advice, exacerbates the issue. Populations with limited access to dermatology services or health literacy are especially vulnerable to this cycle of misinformation, inappropriate self-treatment, and delayed care. Furthermore, TikTok content rarely conveys the risks of perioral corticosteroid use, the importance of proper diagnosis, or evidence-based first-line treatments such as topical calcineurin inhibitors or tetracycline-class antibiotics. Dermatologists and public health practitioners must engage proactively with social media platforms to disseminate accurate information, implement digital literacy campaigns, and advocate for clearer labeling for OTC corticosteroids. Without coordinated public health intervention, the TikTok-driven self-treatment of perioral dermatitis has the potential to increase the burden of chronic facial dermatoses, worsen dermatologic health disparities, and fuel mistrust in professional medical care.*

1. INTRODUCTION

Perioral dermatitis (POD) is a common skin condition majorly affecting young females and children that is characterized by inflammatory papules and pustules on the face. Although the exact mechanism is unknown, clinical manifestations include perivascular and perifollicular inflammation that results in erythematous papules around the nose, eyes, and mouth [1]. POD is thought to be caused by genetic, environmental, and hormonal factors; however, a well-known exacerbating factor is the use of corticosteroids [2,3]. Although facial eruptions can initially respond well to corticosteroid use, withdrawal of the steroid can result in recurring of the facial eruption.

This can lead to steroid addiction, rebound flares, and even severe disease if corticosteroids are used in a prolonged manner [4]. As the disease progresses in severity, POD can evolve into a granulomatous subtype of the disease, sometimes requiring further treatment [1].

Inappropriate steroid use, which is linked to POD, can be perpetuated by misinformation spread across social media platforms online. Such platforms include TikTok, which is one of the fastest growing platforms in the world. Young adults are especially reliant on TikTok for medical advice, with a third of Gen Z individuals trusting TikTok more than physicians for medical advice [5]. However, this phenomenon can be harmful as many creators on TikTok lack formal medical education—in fact, recent studies indicated that 1 in 5 TikTok videos likely contain misinformation [6]. Furthermore, platforms often prioritize user engagement, with the algorithm being determined by trending hashtags, video length, and ratios, rather than medically accurate content, further perpetuating the problem of medical misinformation on social media platforms [7,8].

Users are readily engaged by anecdotal videos that lack information on side effects and the involvement of medical professionals [9]. This culture of "self-diagnosis" and "self-treatment" by young individuals can lead to inappropriate steroid use as "quick fixes" despite corticosteroids not being intended for this use. Especially vulnerable populations include those with adolescents who rely on TikTok as their main information source, those with low health literacy, and those with limited dermatological resources. Furthermore, systematic failures invigorate this issue, with lack of formal health misinformation regulation on TikTok and lack of government requirements about inappropriate corticosteroid use warnings on labels.

This review aims to (1) analyze how TikTok's recommendation algorithms spread dermatological misinformation, (2) examine clinical effects of inappropriate corticosteroid use relating to POD, (3) identify disparities in digital health literacy and dermatologic care, and (4) propose educational, public health, and policy measures to mitigate them. These objectives seek to clarify the relationship between dermatological health, social media, and digital misinformation while also providing an approach for evidence-based digital dermatology.

2. Clinical Implications of Social Media Driven Treatment

Perioral dermatitis can be characterized as small red clusters around the lower facial region, potentially resulting in potential burning, stinging, or tightness [1]. A known trigger for perioral dermatitis is the prolonged application of topical corticosteroids to the face [10]. This medication tends to lead to immediate reduction in redness or irritation but can simultaneously disrupt the protective barrier of the skin and lower the body's immune response [10]. When topical corticosteroids are stopped after prolonged usage, individuals may experience perioral dermatitis recurrence with worsened burning, inflammation, and irritation, ultimately leading to steroid reapplication and a cycle of dependency and exacerbation [1,10].

Clinical evidence supports this mechanism. A study of 110 patients found that constant usage of potent steroid formulations such as betamethasone valerate or clobetasol propionate led to rosacea-like perioral dermatitis. After ceasing corticosteroid usage, almost all of the patients experienced a rebound of inflammation and were required to stop topical steroid use and use additional antibiotics or alternative topical therapy to decrease symptom severity [11]. Furthermore, clinical pathology periodically revealed that epidermal thinning, large capillaries, and inflamed infiltrates are consistent with skin barrier worsening due to steroid-induced skin damage [12]. Collectively, these findings underscore the detriments of long term corticosteroid usage, potentially yielding cutaneous effects.

Identifying and differentiating perioral dermatitis from acne, rosacea, or allergic dermatitis requires a professional diagnosis [2]. Social media frequently provides little to no guidance on distinguishing the difference between these conditions and does not emphasize the importance of an accurate diagnosis and evidence-based treatment [25]. Furthermore, social media "treatment" tends to focus on more cosmetically appealing suppression instead of focusing on a more therapeutic approach [14].

When using social media, individuals may come across videos on rapid rash relief after applying hydrocortisone or similar creams [30]. These posts generally do not discuss the long-term damage and the risk of recurrence [5]. As a result, individuals could misinterpret temporary suppression of symptoms as true healing and fail to recognize the risks that using facial corticosteroid may come with. When symptoms reappear, they may blame the original condition and restart the use of topical steroids, which

continues the harmful cycle of misuse and worsening of their original condition [1,13]. The most common complication of this pattern includes short-term relief followed by recurrence worsening, development of dependency on corticosteroids, and delayed diagnosis alongside appropriate treatment [1]. Individuals may be hesitant in seeing a dermatologist because they feel confident that the over the counter steroid based treatments will be efficient or since social media influences reassured them. By the time they seek professional care, their perioral dermatitis may have progressed to become resistant to certain treatments [10].

As opposed to social media guided treatment, evidence-based first line of therapy emphasizes steroid avoidance and guided usage of safer anti-inflammatory treatments [15]. A randomized, vehicle controlled, double-blind study found topical calcineurin inhibitors such as pimecrolimus cream to be effective for mild perioral dermatitis, lowering disease severity and improving quality of life. The most improvement was seen in individuals with previous usage of corticosteroid, and no significant side effects were noted [16]. In severe or persistent cases of perioral dermatitis, certain oral tetracycline-class antibiotics such as doxycycline or minocycline provide anti-inflammatory relief [13]. Even though sarecycline has not been evaluated in larger trials for perioral dermatitis specifically, certain small series and case reports show positive results in steroid-induced dermatitis with a good tolerance and little gastrointestinal effects [17]. However, these evidence-based therapies are barely mentioned on social medical platforms. Most of the content provided to individuals emphasize over the counter steroid creams or cosmetic treatments which could provide temporary suppression but does not pass proper professional medical management [10]. The lack of accurate, clinical information continues to contribute to the underuse of an effective treatment and prolonged symptoms [14].

3. Role of Tiktok in Misinformation Spread

3.1. Algorithmic Amplification and the "Echo Chamber"

TikTok has become a major source of health information, particularly among adolescents and young adults. Approximately 80% of individuals now seek medical information online, and nearly half report that social media influences their decision on whether to pursue professional care [18]. Among Gen Z users, roughly two-thirds report using TikTok as a search engine. Women, who are the largest group of TikTok users, are both disproportionately affected by health-related content and more likely to adjust their behaviors based on what they encounter on the platform [19,20,21]. Many of the women interviewed report unintentionally obtaining health information without actively searching for it.

TikTok uses a proprietary algorithm that creates a continuous stream of content based on the user's interaction history, rather than chronological order or accounts they follow [22]. This unique filtering mechanism recommends videos liked by others with similar engagement patterns, exposing users to new content, including misinformation, even without intentional searches. Once engaged, users are more likely to encounter similar content, creating an echo chamber and furthering confirmation bias [23].

3.2. Credibility Signals and Storytelling

Perceived credibility on TikTok is heavily influenced by age, education level, and emotional connectedness to the platform. Users who use TikTok more frequently report a higher level of trust in its health content, regardless of creator credentials or expertise [19]. Additionally, emotional storytelling further increases engagement - videos featuring personal anecdotes get nearly five times more views and seven times more likes compared to non-anecdotal content, despite being overwhelmingly produced by non-professionals [24]. Not only are videos with personal stories engaged with more frequently, but they are also rated as more credible. This contributes to the elevation of influencers over medical professionals in visibility and perceived expertise.

The rise in skincare influencers has led to the explosion of viral skincare trends, such as "slugging", the use of so-called "miracle creams," and an increased use of corticosteroids, which are often promoted as quick fixes for complex dermatologic conditions. This content frequently fails to include disclaimers and necessary medical context, which increases the risk of corticosteroid misuse. For example, slugging with petroleum-based products may enhance the absorption and potency of topical steroids, which can increase the likelihood of

adverse effects such as acne, milia, and skin barrier dysfunction [25]. In a recent study, only 36.7% of slugging-related videos were deemed educational, and most informative content came from healthcare professionals, with influencers predominantly sharing personal experiences [26].

Although there are established protocols for topical steroid use, misuse remains common. Only 5.5% of patients surveyed understand the specific corticosteroid they are using or its potential risks, and only one-third are aware of proper indications for use [27]. Improper application, overuse, or abrupt withdrawal can result in skin irritation and significant dermatologic complications, including topical steroid withdrawal syndrome. Corticosteroids are frequently mentioned in TikTok dermatology content without a recommendation to discuss with a healthcare provider prior to beginning use or mention of potential side effects. A recent content analysis found that while moisturizers were the most recommended treatment for atopic dermatitis, topical corticosteroids were also commonly cited, often within anecdotal narratives that may encourage unsupervised use [28].

3.3. Content Quality and Creator Credentials

Dermatology content on TikTok is largely created by non-experts - a recent study analyzing videos addressing common skin conditions found that nearly two-thirds were posted by laypeople. An analysis of content addressing common skin conditions found that licensed professionals focused primarily on acne, while non-professionals were responsible for the majority of eczema and psoriasis-related content. Importantly, videos created by dermatologists had a 96.8% adherence to American Academy of Dermatology (AAD) guidelines, compared to just 48% for those created by patients, indicating their reliability [29]. Even when board-certified dermatologists create content on TikTok, their visibility remains low, with a recent study showing that their representation in trending hashtags such as #skincare was limited to just 2.5% of posts, with influencer content gaining significantly more views [30]. Trending videos under the hashtag #skincare averaged hundreds of millions of views but often promoted routines that lacked sunscreen, contained multiple potentially irritating ingredients, and were frequently targeted at adolescent viewers that may be more susceptible to influence [31].

The divide between influence and expertise highlights a growing challenge in today's digital world: anecdote-driven content from influencers typically spreads faster and wider than evidence-based videos from licensed professionals. As a result, platforms like TikTok may unintentionally promote harmful practices, delay necessary clinical intervention, and minimize the voices of medical professionals [28].

4. Vulnerabilities in Current Healthcare Landscape

4.1. Populations At Risk

4.1.1 Access Barriers

According to a 2023 study, Duniphin reports a current average of 3.4 dermatologists available per 100,000 population for patients who require dermatological services in the US [32]. Specifically, Pearlman et al. (2022) notes that urban areas were found to have 40 times the concentration of dermatologists per 100,000 people to that of rural areas, implying that a significant disparity exists between patients living in urban and rural areas with access to a dermatologist [33]. The rate at which patients need dermatological services is growing rapidly, however, dermatologist density per capita has not nearly increased enough across the country to bridge the gaps in access [34]. Narla et al. (2023) highlights that many underrepresented communities, particularly, individuals who identify as American Indian or Alaska Native, Asian, Black, and Native Hawaiian or other Pacific Islander fall under the skin of color (SOC) group that share similar pigmentation characteristics and disease response patterns that are often overlooked in dermatology [35]. This considerably impairs the quality of care provided and limits treatment avenues for patients who belong to this group. Patients who are unable to afford healthcare, identify as low-income, belong to marginalized communities or are uninsured are disproportionately impacted by dermatologic health disparities which prevents them from accessing dermatologic care when they need it the most [34]. Those with lower health literacy levels may have limited awareness or understanding of chronic conditions and may underestimate the severity of their condition, thus, delaying their diagnosis [36].

Such patient populations, as identified above, are at a significant disadvantage without regular access to dermatological services and may resort to low-cost solutions available via freely accessible platforms on the internet to manage their symptoms, which include recommendations that are not always rooted in evidence-based medicine [37]. This perpetuates a cycle where inaccessible specialized care coupled with low health literacy leads many patients down the path of inappropriate self-treatment which only exacerbates existing symptoms, complicates treatment outcomes and worsens overall recovery duration for patients living with chronic skin conditions such as perioral dermatitis. Patients who self-treat for perioral dermatitis may also unknowingly use over-the-counter skincare products of inappropriate dosage and expose themselves to harsh triggers that can cause adverse skin reactions [1].

4.1.2. Digital Health Literacy and Adolescents

Additionally, adolescents who engage with social media and are exposed to unregulated posts on dermatologic trends are more likely to heed the advice of content creators who often lack the relevant credentials or expertise in the field [38]. This makes youth highly susceptible to being misled if they are unable to discriminate facts from fads promoted on social media. Despite having access to a dermatologist, it is also not uncommon to find some patients who would prefer to self-diagnose and try online remedies as a first-line treatment before seeking care from a professional dermatologist, which has a drastic impact on their mental well-being and quality of life [37].

4.1.3. Compounding Barriers and Disparities

Self-treatment based on dermatology-related misinformation found online and on platforms such as TikTok can pose a widespread threat for different patient demographics but the consequences are arguably far more detrimental for ethnic minorities, youth who are reliant on social media for their news, those living in rural areas, have low health literacy or are low-income. In reality, these patient populations often tend to live with a combination of these barriers, which multiplies their risk for complications, fosters medical mistrust and makes them more vulnerable to poor clinical outcomes.

4.1.4. Systemic Failures Enabling Misuse

Easy access to topical corticosteroids and lack of clear guidance on facial application contributes to inappropriate self-treatment. In the U.S., over the counter (OTC) hydrocortisone (up to 1% strength) is widely available for self-care of minor rashes and itching [39]. However, despite hydrocortisone 1% being the only FDA-approved OTC corticosteroid in the U.S., many ethnic and international stores sell imported medium- to high-potency prescription strength products imported from countries where they are legally available over the counter [39]. Such widespread availability creates opportunities for misuse, as individuals can bypass medical evaluation and obtain topical corticosteroids for self-diagnosed conditions. A further concern is that FDA labeling for OTC corticosteroids provides only on general precautions (e.g. external use only, avoid contact with eyes, and limited duration of use) [40]. However, there is no explicit warning advising against use on the face, even though facial skin is thinner, more sensitive, and prone to steroid-related complications. A randomized controlled trial showed that applying hydrocortisone 1% cream to the forehead resulted in a significant reduction in epidermal thickness in just two weeks [41]. This adverse effect underscores the risk of even short-term, unsupervised use of topical corticosteroids on the face.

The largely unregulated nature of medical advice on social media further exacerbates misuse. Approximately 1 in 5 TikTok videos contain misinformation, and formal fact-checking is rare [19]. This absence of oversight is a systemic failure: viewers are constantly exposed to health “tips” and anecdotal remedies in an environment that portrays the illusion of legitimacy. In an analysis of popular dermatology-related posts on TikTok, lay users produced the most content and garnered the most views, whereas board-certified dermatologists accounted for only about 15% of posts [30]. This credibility gap allows non-expert voices to dominate, enabling influencers to promote inappropriate topical corticosteroid use to millions of viewers without any risk disclosures. Individuals who are frustrated by chronic skin conditions and lack access to dermatologic care may be particularly vulnerable to the promises of such unregulated content. These patterns underscore an urgent need for stronger oversight and regulatory frameworks to prevent dermatologic complications.

5. Call To Action: Public Health And Dermatologic Interventions

TikTok has an ethical responsibility to moderate and regulate potentially harmful medical content on its platform, especially regarding remedies for dermatological conditions such as perioral dermatitis. The platform's lack of sufficient health content guidelines has led to the rapid dissemination of topical steroid misinformation. The majority of dermatology content on TikTok is produced by non-licensed creators; only a minority of dermatological videos are backed by board-certified dermatologists and other health professionals [30]. The site's algorithm-based amplification of popular, but often unverified, content increases the risk that TikTok users will encounter misinformation, such as advice encouraging the unregulated use of over-the-counter (OTC) corticosteroids for facial rashes, which can exacerbate perioral dermatitis [30,42]. With its large adolescent user base, TikTok has an obligation to implement stricter content moderation that promotes evidence-based dermatological content from licensed medical professionals to minimize harm to its younger users. The emotional and psychological consequences of consuming social media health misinformation can be significant, especially among adolescents and children, who may lack the health literacy skills needed to distinguish between credible medical advice and influencer-driven trends [43]. Exposure to inaccurate dermatologic remedies can foster skin anxiety, body dysmorphic fears, and shame, particularly when a user's attempt to self-treat a skin disorder fails or worsens the condition [44,45]. The incongruity of the user's outcome compared to the content shown may erode trust in professional medical care and delay proper treatment, increasing the risk of mental health comorbidities such as anxiety and depression.

Public health and dermatological responses to this misinformation crisis should consider the implementation of digital literacy lessons in school curricula, verification systems for board-certified dermatologists on TikTok and other social media platforms, and the adjustment of labeling requirements for OTC corticosteroids, which, when misused, can result in topical steroid addiction, rebound flares, or even steroid-induced dermatitis or atrophy [46]. Furthermore, public health campaigns that involve the pairing of dermatologists and content creators through collaborations can also serve to improve the quality and visibility of evidence-based medical information and assist users in properly evaluating the authenticity of online health content [22, 47].

However, barriers such as social media platforms' resistance to content regulation, the prioritization of commercial interests by pharmaceutical and social media companies, and fragmented oversight across different regions and countries present significant challenges. To overcome these challenges and sufficiently regulate dermatology-related content, public health officials will have to coordinate interdisciplinary efforts with licensed medical professionals and social media leadership.

6. Conclusion and Future Directions

TikTok's algorithmic amplification of influencer-curated content has contributed to the potentially harmful self-treatment of dermatologic conditions, such as perioral dermatitis (POD). In this environment, where misinformation often eclipses evidence-based, physician-produced content, the likelihood of topical steroid misuse increases. The implications of this include exacerbation of POD, dysfunction of the skin barrier, as well as the development of topical steroid dependence. Individuals with limited access to care are most disproportionately affected by social media misinformation and often experience these effects most profoundly. TikTok is increasingly utilized as a primary source for how individuals obtain and disseminate health information [48]. Therefore, TikTok has an ethical responsibility to prioritize credibility over user engagement through promotion of qualified professionals' educational content. It is imperative for healthcare professionals to proactively produce and share evidence-based content, as well as cautioning against using social media content in place of physician-directed advice and medical therapy.

During the COVID-19 pandemic, TikTok began labeling videos containing vaccine misinformation with an in-app banner with a direct link to the World Health Organization (WHO) website [49]. In 2024, TikTok announced an official partnership with WHO with the objective to combat misinformation on the platform [50]. The inclusion of direct links to validated informational content on videos containing medical advice or opinion has the potential to encourage viewers to verify claims independently, thereby promoting health

literacy. Collaborations with major health authorities such as the WHO demonstrate progress toward improved fact-checking, but sustained oversight and improvements in moderation of content through TikTok administration are still necessary. As public health education continues to evolve, research must recognize social media as a primary source of health education for the general public. Longitudinal studies exploring dermatologic misinformation on social media and resultant outcomes must be explored. Further investigation into the deleterious effects of self-directed therapies via social media-acquired advice can further underscore the importance of stricter oversight of the dissemination of health information by unreliable sources on public platforms. A multifaceted approach to combating harmful self-directed therapies can include the promotion of credible information curated through dermatologists on TikTok, improved regulation and labeling of over-the-counter topical medications such as hydrocortisone, and the promotion of media literacy among social media users.

REFERENCES

[1] Tolaymat L, Hall MR. Perioral dermatitis. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023. Accessed August 4,2025.https://www.ncbi.nlm.nih.gov/books/NBK525968/

[2] Tempark T, Shwayder TA. Perioral dermatitis: a review of the condition with special attention to treatment options. *Am J Clin Dermatol.* 2014; 15(2):101-113.

[3] Kosari P, Feldman SR. Case report: fluocinonide-induced perioral dermatitis in a patient with psoriasis. *Dermatol Online J.* 2009; 15(3):15.

[4] Hengge UR, Ruzicka T, Schwartz RA, Cork MJ. Adverse effects of topical glucocorticosteroids. *J Am Acad Dermatol.* 2006; 54(1):1-15; quiz 16-18.

[5] Gordon D. 33% of Gen Zers trust TikTok more than doctors, new survey shows. *Forbes.* Published December 20, 2022. Accessed August 4, 2025. [https:/ /www. forbes. com/ sites /debgordon/2022/12/20/33-of-gen-zers-trust-tiktok-more-than-doctors-new-survey-shows/](https://www.forbes.com/sites/debgordon/2022/12/20/33-of-gen-zers-trust-tiktok-more-than-doctors-new-survey-shows/)

[6] Brewster J, Arvanitis L, Pavilonis V, Wang M. Misinformation monitor: September 2022. *NewsGuard.* Published 2022. Accessed August 4, 2025. [https:// www. Newsguardtech .com/ misinformation-monitor/september-2022] (https://www.newsguardtech.com/misinformation-monitor/september-2022)

[7] Milli S, Carroll M, Wang Y, Pandey S, Zhao S, Dragan AD. Engagement, user satisfaction, and the amplification of divisive content on social media. *PNAS Nexus.* 2025;4(3)\:pgaf062. doi:10.1093/pnasnexus/pgaf062

[8] Zhou R. Understanding the impact of TikTok's recommendation algorithm on user engagement. *IntJ Comput Sci Inf Technol.* 2024; 3(2):201-208.doi:10.62051/ijcsit.v3n2.24

[9] Galamgam J, Jia JL. "Accutane Check": insights into youth sentiment toward isotretinoin from a TikTok trend. *Pediatr Dermatol.* 2021; 38 (4): 980-981. Doi:10.11 11/ pde.14660

[10] Mokos ZB, Kummer A, Mosler EL, Čeović R, Basta-Juzbašić A. Perioral dermatitis: still a therapeutic challenge. *Acta Clin Croat.* 2015; 54(2):179-185. PMID: 26415314

[11] Rathi SK, Kumrah L. Topical corticosteroid-induced rosacea-like dermatitis: a clinical study of 110 cases. *Indian J Dermatol Venereol Leprol.* 2011; 77(1):42-46. doi:10.4103/0378-63 23 .74 974

[12] Diehl KL, Cohen PR. Topical steroid-induced perioral dermatitis (TOP STRIPED): case report of a man who developed topical steroid-induced rosacea-like dermatitis (TOP SIDE RED).*Cureus.*2021;13(4):e14443.Doi:10.7759/ cureus .14443

[13] Sher A, Kresch M, Bitterman D, Elbogen E, Lebwohl MG. Sarecycline as a potential treatment for steroid-induced rosacea/perioral dermatitis: a case report. *J Drugs Dermatol.* 2024; 23(2):e55-e56. doi:10.36849/JDD.7638

[14] Rosso JQ. Management of papulopustular rosacea and perioral dermatitis with emphasis on iatrogenic causation or exacerbation of inflammatory facial dermatoses: use of doxycycline-modified release 40 mg capsule once daily in combination with properly selected skin care as an effective therapeutic approach. *J Clin Aesthet Dermatol.* 2011;4(8):20-30.

[15] Oppel T, Pavicic T, Kamann S, Bräutigam M, Wollenberg A. Pimecrolimus cream (1%) efficacy in perioral dermatitis: results of a randomized, double-blind, vehicle-controlled study in 40 patients. *J Eur Acad Dermatol Venereol.*2007; 21(9):1175-1180. Doi:10.1111/j. 1468-3083.2007.02191.x

[16] Schwarz T, Kreiselmaier I, Bieber T, et al. A randomized, double-blind, vehicle-controlled study of 1% pimecrolimus cream in adult

patients with perioral dermatitis. *J Am Acad Dermatol.* 2008; 59(1):34-40. DoI:10.1016/j.jaad.2008.03.043

[17] Swenson K, Stern A, Graber E. A retrospective review of a cohort of patients with periorificial dermatitis treated with sarecycline. *J Clin Aesthet Dermatol.* 2024;17(6):50-54. PMID: 38912196; PMCID: PMC11189645

[18] Villa-Ruiz C, Kassamali B, Mazori DR, et al. Overview of TikTok's most viewed dermatologic content and assessment of its reliability. *J Am Acad Dermatol.* 2021; 85(1):273-274. doi:10.1016/j.jaad.2020.12.028

[19] Kirkpatrick CE, Lawrie LL. TikTok as a source of health information and misinformation for young women in the United States: survey study. *JMIR Infodemiol.* 2024;4:e54663. DoI:10.2196/ 54663

[20] Koetsier J. GenZ dumping Google for TikTok, Instagram as social search wins. *Forbes.* Published March 11, 2024. Accessed August 4, 2025. https://www.forbes.com/sites/johnkoetsier/2024/03/11/genz-dumping-google-for-tiktok-instagram-as-social-search-wins/

[21] Rehman R, Hasan S, Akram H, Jahnke M. TikTok as a source of dermatologic information on atopic dermatitis. *Dermatitis.* 2022; 33(6S): S133-S134. Doi:10.1097/DER.0000000000000830

[22] Zheng DX, Mulligan KM, Scott JF. TikTok and dermatology: an opportunity for public health engagement. *J Am Acad Dermatol.* 2021; 85(1):e25-e26. doi:10.1016/j.jaad.2021. 02.050

[23] Lundy M. TikTok and COVID-19 vaccine misinformation: new avenues for misinformation spread, popular infodemic topics, and dangerous logical fallacies. *Int J Commun.* 2023;17(0):Article 0.

[24] Lehembre-Shiah E, Kronfel H, Eisenberg J, Naroji S, Grunebaum A. Understanding TikTok as a source of medical information about endometriosis. *J Minim Invasive Gynecol.* 2023; 30(11):S23. Doi:10.1016/j.jmig. 2023 .08 .064

[25] Trepanowski N, Grant-Kels JM. Social media dermatologic advice: dermatology without dermatologists. *JAAD Int.*2023; 12:101-102. doi:10.1016/j.jdin.2023.05.004

[26] Pagani K, Lukac D, Martinez R, Jablon K, McGee JS. Slugging: TikTok™ as a source of a viral "harmless" beauty trend. *Clin Dermatol.* 2022; 40(6):810-812. doi:10.1016/j.clindermatol.2022. 08.005

[27] Haddad F, Abou Shahla W, Saade D. Investigating topical steroid withdrawal videos on TikTok: cross-sectional analysis of the top 100 videos. *JMIR Form Res.* 2024; 8. doi:10.2196/48389

[28] Niewijk G. Can you find good health information on TikTok? UChicago study advises caution. *University of Chicago News.* Published June 10, 2024. Accessed August 4, 2025. https://news.uchicago.edu/story/can-you-find-good-health-information-tiktok-uchicago-study -advises-caution

[29] Campbell JR, Williams K, Woolery-Lloyd H. DermTok: how TikTok is changing the landscape of dermatology patient education. *J Drugs Dermatol.* Published March 2023. Accessed August 4, 2025. Https://jddonline.com/articles/dermtok-how-tiktok-is-changing-the-landscape-of-dermatology-patient-educatuion-S1545961623P0302X/

[30] Nguyen M, Youssef R, Kwon A, Chen R, Park JH. Dermatology on TikTok: analysis of content and creators. *Int J Womens Dermatol.* 2021;7(4):488489.doi:10.1016/j.ijwd.2021.04.006

[31] Hales M, Rigali S, Paller A, Liszewski W, Lagu T. Pediatric skin care regimens on TikTok. *Pediatrics.*2025;156(1):e2024070309.Doi:10154 2/peds.2024-070309

[32] Duniphin D. Limited access to dermatology specialty care: barriers and teledermatology. *Dermatol Pract Concept.*2023; 113(1):e2023031. doi:10.5826/dpc.1301a31

[33] Pearlman R, Brodell R, Byrd A. Enhancing access to rural dermatological care: the time to start is now. *JAMA Dermatol.* 2022; 158(7):725726.doi:10.1001/jamadermatol.2022.1470

[34] Maddukuri S, Patel J, Lipoff J. Teledermatology addressing disparities in health care access: a review. *Curr Dermatol Rep.* 2021; 10(2):40-47. doi:10.1007/s13671-021-00329-2

[35] Narla S, Heath C, Alexis A, Silverberg J. Racial disparities in dermatology. *Arch Dermatol Res.* 2023; 315(5):1215-1223. doi:10.1007/s00403-022-02507-z

[36] Coughlin S, Vernon M, Hatzigeorgiou C, Varghese G. Health literacy, social determinants of health, and disease prevention and control. *J Environ Health Sci.* 2021; 6(1):3061.

[37] Mehta-Ambalal S, Nisarta M. Dermatology 2.0—how the internet is changing us, our patients and our practice. *Indian Dermatol Online J.* 2021; 12(4):593-596. doi: 10. 4103 /idoj.IDOJ_788_20

[38] McCoy K, Class M, Ricles V, et al. Kids these days: social media's influence on adolescent behaviors. *J Clin Aesthet Dermatol.* 2024; 17(5):40-42.

[39] Kimyon RS, Schlarbaum JP, Liou YL, et al. Prescription-strength topical corticosteroids

available over the counter: cross-sectional study of 80 stores in 13 United States cities. *J Am Acad Dermatol.* 2020; 82(2):524-525.

[40] Ellis CN, Pillitteri JL, Kyle TK, et al. Consumers appropriately self-treat based on labeling for over-the-counter hydrocortisone. *J Am Acad Dermatol.* 2005; 53(1):41-51. doi:10.1016/j.jaad .2005.01.107

[41] Aschoff R, Schmitt J, Knuschke P, et al. Evaluation of the atrophogenic potential of hydrocortisone 1% cream and pimecrolimus 1% cream in uninvolved forehead skin of patients with atopic dermatitis using optical coherence tomography. *Exp Dermatol.* 2011; 20(10):832836.doi:10.1111/j.16000625.2011.01335.x

[42] Finnegan P, Murphy M, O'Connor C. #corticophobia: a review on online misinformation related to topical steroids. *Clin Exp Dermatol.* 2023; 48(2):112-115. Doi:10.1093/ced/llac019

[43] Conte G, Iorio GD, Esposito D, et al. Scrolling through adolescence: a systematic review of the impact of TikTok on adolescent mental health. *Eur Child Adolesc Psychiatry.* 2025; 34(5):1511-1527. doi:10.1007/s00787-024-02581-w

[44] Rieder EA, Andriessen A, Cutler V, et al. Dermatology in contemporary times: building awareness of social media's association with adolescent skin disease and mental health. *J Drugs Dermatol.* 2023; 22(8):817-825. doi:10.36849/jdd.7596

[45] Young TK, Oza VS. Digital dermatoses: skin disorders engendered by social media in tweens and teens. *Curr Opin Pediatr.* 2021; 33(4):373-379. doi:10.1097/MOP.0000000000001037

[46] Tan S, Phan P, Law JY, Choi E, Chandran NS. Qualitative analysis of topical corticosteroid concerns, topical steroid addiction and withdrawal in dermatological patients. *BMJ Open.* 2022; 12(3):e060867. doi:10.1136/ bmjopen-2022-060867

[47] MacKinnon KR, Kia H, Lacombe-Duncan A. Examining TikTok's potential for community-engaged digital knowledge mobilization with equity-seeking groups. *J Med Internet Res.* 2021; 23(12):e30315. doi:10.2196/30315

[48] Quartey A, et al. Is TikTok the new Google? Content and source analysis of Google and TikTok as search engines for dermatologic content in 2024. *J Am Acad Dermatol.* 2024; 93(1):e25-e26.

[49] TikTok. Taking action against COVID-19 vaccine misinformation. *TikTok Newsroom.* Published 2020. Accessed August 4, 2025. https://newsroom.tiktok.com/en-gb/taking-action-against-covid-19-vaccine-misinformation

[50] Zenone M, Kenworthy N. Should WHO partner with TikTok to combat misinformation? *Lancet.*2024; 404(10467):2046-2047. doi:10.1016/ S0140-6736 (24)02429-2

Citation: *Amber Sun et al. "Tiktok-Driven Self-Treatment of Perioral Dermatitis with Over-the-Counter Corticosteroids: Clinical, Public Health, and Equity Implications". ARC Journal of Dermatology. 2026; 9(1):12-20. DOI: https://doi.org/10.20431/2456-0022.0901002*