



Research Letter

Dermatology on TikTok: Analysis of content and creators



Dear Editors,

The Internet is an increasingly popular resource for health care consumers, with 72% accessing health information online (Zhao and Zhang, 2017). TikTok, the fastest growing video-sharing social media network since 2019 (Sherman, 2020), represents a growing source of medical information. We aimed to characterize the content and sources of top dermatology posts on TikTok.

The top 10 dermatologic diagnoses and procedures from publicly available survey data were queried as TikTok hashtags (American Society for Dermatologic Surgery, 2019; Wilmer et al., 2014). Content of the first 40 videos for each hashtag was analyzed in July 2020 and classified by creator (health care professional [HCP], personal, business, professional organization), content (education, promotional, patient experience, entertainment), and impact (views, likes, comments, shares). Board-certification status was determined using the American Board of Medical Specialties website. TikTok's data are publicly available; thus, this study was exempt from institutional review board review.

A total of 544 videos were analyzed. Laypeople (personal accounts) created the most videos, followed by HCPs (Fig. 1). Board-certified dermatologists (BCDs) accounted for 15.1% of the total posts but authored a significant percentage of posts with the hashtags “dermatology” (45%), “dermatologist” (40%), and “boardcertifieddermatologist” (66.7%). BCDs accounted for the most videos made by an HCP (33%; Fig. 1).

The content was predominantly educational (40.8%), followed by entertainment (26.7%; Table 1). The most popular educational content discussed was skincare (40.1%), dermatologic procedures (30.6%), and disease treatment (15.1%). Dermatologic diagnoses were more popular than procedures (2.5 vs. 708.2 million views). Videos from laypeople received the largest percentage of views (50.68%), followed by business/industry accounts (30.46%), HCPs (18.52%), and professional organizations (0.34%). The most-liked (66.9 million) and most-viewed (378 million) posts were both related to #skincare, but only 2.5% of analyzed #skincare videos were produced by BCDs.

TIKTOKS BY CREATOR TYPE

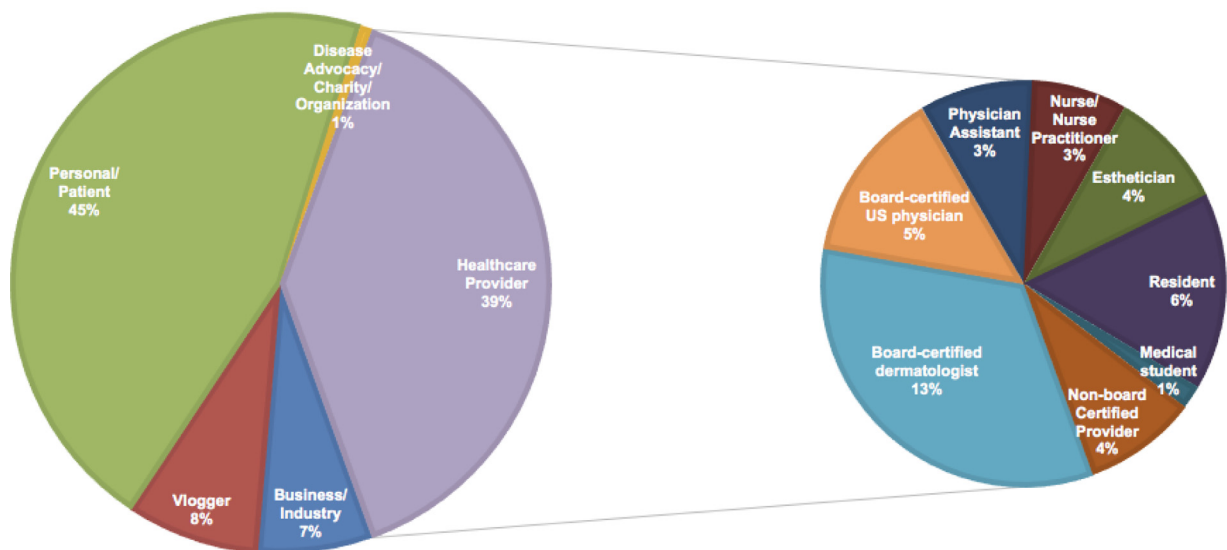


Fig. 1. Dermatology-related TikTok videos by creator type. A pie chart depicting percentage of reviewed total videos created by personal, vlogger, business, advocacy, and health care provider accounts.

Table 1

Views, content, and authorship of popular dermatology-related hashtags on TikTok, showing views, subcategories of content, and percentage of posts by board-certified dermatologists for each hashtag term analyzed

Hashtag	No. of views	Content, n (%)			Promotional	Entertainment	Posts by board-certified dermatologists, %
		Educational	Patient Experience				
General							
Dermatology	105.1M	25 (62.5)	2 (5)	6 (15)	7 (17.5)	45	
Dermatologist	256.1M	26 (65)	1 (2.5)	9 (22.5)	4 (10)	40	
Boardcertifieddermatologist ^a	30.4K	10 (41.67)	1 (4.17)	9 (37.5)	4 (16.67)	66.7	
Skincare	378.0M	13 (32.5)	0 (0)	0 (0)	27 (67.5)	2.5	
Dermatologic diagnoses	2.5B	76 (38)	55 (27.5)	19 (9.5)	50 (25)	10	
Acne	2.0B	17 (42.5)	8 (20)	11 (27.5)	4 (10)	2.5	
Alopecia	254.8M	0 (0)	7 (17.5)	4 (10)	29 (72.5)	0	
Cyst	225.6M	33 (82.5)	5 (12.5)	0 (0)	2 (5)	47.5	
Rash	27.1M	10 (25)	20 (50)	0 (0)	10 (25)	0	
Eczema	23.0M	16 (40)	15 (37.5)	4 (10)	5 (12.5)	0	
Dermatologic procedures	708.2M	72 (36)	36 (18)	39 (19.5)	53 (26.5)	5.5	
Tattooremoval	286.7M	0 (0)	5 (12.5)	29 (72.5)	6 (15)	0	
Botox	205.3M	14 (35)	0 (0)	0 (0)	26 (65)	12.5	
Filler	79.5M	12 (30)	11 (27.5)	6 (15)	11 (27.5)	7.5	
Acnescars	75.9M	36 (90)	3 (7.5)	0 (0)	1 (2.5)	7.5	
Laserhairremoval	60.8M	10 (25)	17 (42.5)	4 (10)	9 (22.5)	0	
Total across all hashtags	3.9B	222 (40.8)	95 (17.5)	82 (15.1)	145 (26.7)	15.1	

B, billion; K, thousand; M, million

^a Only 24 videos published for this hashtag.

Despite a few dermatologists with followings in the millions, a majority of TikTok's dermatology-related videos were produced by laypeople. Interestingly, BCDs are responsible for more than three times the amount of dermatology-related content on TikTok compared with Instagram (15.1% vs. 4%; Ranpariya et al., 2020). After BCDs, dermatology residents created the most videos among HCPs (16%), suggesting an evolving landscape of patient education on social media as trainees become BCDs.

The majority of analyzed content was educational and largely discussed skincare, confirming TikTok's use for sharing health information. Most posts featured conventional treatments, but a minority (<1%) included nonconventional treatments, such as banana peel masks, vinegar paste for eczema, and gua-sha massage as a Botox-equivalent. Some posts even featured dangerous treatments, such as at-home microneedling and hyaluronic acid injection or rubbing lemon and ice on the face.

Medical dermatology hashtags garnered more views than procedural ones and more often featured content related to education and patient experience. Comparatively, procedural dermatology hashtags had significantly more promotional content, meaning self or product-promotion.

Patients are increasingly turning to social media for health information, where most dermatology-related TikTok videos provide education by laypeople. Our research provides a comprehensive overview of dermatologic information on TikTok and highlights the need for BCDs to be aware of skincare trends that our patients are exposed to online.

Declaration of Competing Interest

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Study approval

The author(s) confirm that any aspect of the work covered in this manuscript that has involved human patients has been conducted with the ethical approval of all relevant bodies.

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