JMI&R Dermatology

All topics related to diseases of the skin, hair, and nails, with special emphasis on technologies for information exchange, education, and clinical care
Volume 7 (2024)   ISSN: 2562-0959   Editor in Chief: Robert Dellavalle MD, PhD, MSPH

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Visibility of Board-Certified Dermatologists on TikTok

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Abstract

TikTok is an emerging social media platform that provides a novel opportunity for health practitioners such as dermatologists to disseminate accurate health information.

(Keywords: board; certification; board certification; health; media; public; social; TikTok; social media; health information; misinformation; diagnosis; users; medical training; training; media content; skin; derma; derm; dermatologist; dermatology; epidermis; dermatitis; cellulitis; skin doctor; skin; hair; nail)

Introduction

TikTok is a video-sharing social media platform with over 1.1 billion active users since its launch in 2016 [1]. Social media platforms such as TikTok are used by medical and nonmedical professionals to share health information. However, health misinformation spreads more quickly than evidence-based information, posing a public health issue [2]. Our study aimed to categorize popular dermatology-related posts and analyze the visibility of board-certified dermatologists (BCD) on TikTok.

Methods

The methods were based on a previous study that examined dermatology content on Instagram by Park et al [3]. First, a list of top dermatologic diagnoses and procedures was compiled based on the National Ambulatory Medical Care Survey and the American Society of Dermatologic Survey of Dermatologic Procedures [4,5]. Then, all of the terms were queried as hashtags in TikTok’s search feature on January 2, 2021.

The 20 dermatologic conditions and procedures with the highest total views were identified. Profession-specific hashtags (#dermatology, #boardcertifieddermatologist, #dermatologist, and #derm) were also queried. The term with the highest total views was chosen among synonymous terms.

The first 10 posts under each of the 44 hashtags were then viewed. Top posts were selected through TikTok’s private algorithm, which uses total views, followers, and other metrics. Users’ self-reported occupations were identified, and board certifications were confirmed through the Certification Matters website [6]. Posts were categorized into 4 categories: educational, self-promotional, non–paid product placements, and advertisements. Educational content was identified as any post that aimed to provide informative material regarding a dermatologic condition and/or procedure. Self-promotional content was defined as posts intended to advance the user’s professional pursuits. Non–dermatology-related posts were excluded.

https://derma.jmir.org/2024/1/e46085

(JMIR Dermatol 2024;7:e46085) doi:10.2196/46085
**Results**

Of the 18.68 billion total views of the hashtags investigated, 12.9 billion (69.1%) were related to skin conditions, 4.26 billion (22.8%) were related to dermatologic procedures, and 1.52 billion (8.17%) were profession-specific.

Out of 231 unique user profiles that accounted for the 360 top dermatology-related posts, 70 (30.3%) were patients, 66 (28.5%) were medical professionals, and 11 (4.76%) were estheticians (Table 1).

BCD and dermatology residents made up 15 (6.49%) and 7 (3.03%) of the top dermatology-related content creators, respectively. In the queried hashtags, verified BCD and dermatology residents created 13.89% (50/360) and 8.89% (32/360) of the top posts, respectively.

Of the identified top posts, 46.67% (168/360) were educational, 27.50% (99/360) were self-promotional, 13.89% (50/360) were non–paid product placements, and 0.83% (3/360) were advertisements.

A total of 29.76% (50/168) and 70.24% (118/168) of educational posts were created by nonmedical and medical professionals, respectively; specifically, BCD created 20.83% (35/168) and dermatology residents created 18.45% (31/168). BCD were responsible for only 30% of the profession-specific hashtag-identified posts (Table 2).

**Table 1.** Medical professionals versus nonmedical professionals who created top dermatology-related TikTok videos (total unique creators: N=231).

<table>
<thead>
<tr>
<th>Category</th>
<th>Self-identified, n (%)</th>
<th>Residency or board-certified status confirmed, n (%) of total unique creators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medical professionals</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermatologists</td>
<td>15 (6.49)</td>
<td>13 (5.63)</td>
</tr>
<tr>
<td>Dermatology residents</td>
<td>7 (3.03)</td>
<td>7 (3.03)</td>
</tr>
<tr>
<td>Physicians in other specialties</td>
<td>21 (9.09)</td>
<td>16 (6.93)</td>
</tr>
<tr>
<td>Nurse practitioners</td>
<td>6 (2.6)</td>
<td>4 (1.73)</td>
</tr>
<tr>
<td>Physician’s assistants or associates</td>
<td>2 (0.87)</td>
<td>2 (0.87)</td>
</tr>
<tr>
<td>Registered nurses</td>
<td>4 (1.73)</td>
<td>2 (0.87)</td>
</tr>
<tr>
<td>Unspecified</td>
<td>11 (4.76)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>All medical professionals</td>
<td>66 (28.57)</td>
<td>44 (19.05)</td>
</tr>
<tr>
<td><strong>Nonmedical professionals</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patients</td>
<td>70 (30.3)</td>
<td>N/Aa</td>
</tr>
<tr>
<td>Estheticians</td>
<td>11 (4.76)</td>
<td>N/A</td>
</tr>
<tr>
<td>Verified account (brand or influencer)</td>
<td>12 (5.19)</td>
<td>N/A</td>
</tr>
<tr>
<td>Other</td>
<td>72 (31.17)</td>
<td>N/A</td>
</tr>
<tr>
<td>All nonmedical professionals</td>
<td>165 (71.43)</td>
<td>N/A</td>
</tr>
</tbody>
</table>

aN/A: not applicable.

**Table 2.** Users responsible for the top 10 videos under each profession-specific hashtag.

<table>
<thead>
<tr>
<th>Users</th>
<th>Hashtag, n</th>
<th>#dermatology</th>
<th>#derm</th>
<th>#dermatologist</th>
<th>#boardcertifieddermatologist</th>
<th>Total, n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board-certified dermatologist</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td></td>
<td>12 (30)</td>
</tr>
<tr>
<td>Dermatology resident</td>
<td>4</td>
<td>0</td>
<td>8</td>
<td>1</td>
<td></td>
<td>13 (32.5)</td>
</tr>
<tr>
<td>Internal medicine physician</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td></td>
<td>7 (17.5)</td>
</tr>
<tr>
<td>Registered nurse</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td></td>
<td>2 (5)</td>
</tr>
<tr>
<td>Esthetician</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
<td>1 (2.5)</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
<td>5 (12.5)</td>
</tr>
</tbody>
</table>

**Discussion**

Our results suggest that most of the popular dermatology-related content on TikTok is created by individuals without verifiable medical training. This highlights a space for BCD to showcase their profession and prevent the spread of health misinformation. As the use of social media platforms like TikTok continues to grow, BCD have an opportunity to increase their presence as a credible source for the public to acquire dermatologic knowledge.
The use of hashtags explicitly related to dermatology by users who are not BCD or dermatology residents may mislead TikTok users. Transparency regarding professional health care credentials on TikTok may improve credibility. There is currently no way to verify professional credentials on TikTok; a feature to distinguish medical professionals from nonmedical professionals can add to the visibility of BCD and help users make informed decisions regarding their source of health information online.

### Conflicts of Interest

RKS is a scientific advisor for LearnHealth, Arbonne, and Codex Labs Corp and a consultant for Burt’s Bees, Novozymes, Nutrafol, Incyte, Fotona, Biogena, Image Skincare, Bristol Myers Squibb, Novartis, Pfizer, AbbVie, LEO Pharma, UCB, Sun, Sanofi, and Regeneron Pharmaceuticals.

### References


6. Certification Matters. URL: https://www.certificationmatters.org/ [accessed 2023-10-06]

### Abbreviations

**BCD**: board-certified dermatologists
Reflecting on Decades of Data: The Global Burden of Disease–Cochrane Project

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(JMIR Dermatol 2024;7:e41323) doi:10.2196/41323

KEYWORDS
Global Burden of Disease; Cochrane Library; review; trachoma; onchocerciasis; vitamin A deficiency; data; glaucoma; macular degeneration; vision loss; disorders; disease burden

Introduction
The Global Burden of Disease (GBD) 2010 study was a systemic epidemiological collaboration between seven institutions to quantify health loss due to diseases, injuries, and risk factors [1]. Its purpose was to develop a platform to compare the magnitude of these health metrics across age groups, countries, sexes, and times, producing comparative metrics for hundreds of causes of premature death and disability. Participating institutions included the “Institute for Health Metrics and Evaluation as the coordinating center, the University of Queensland School of Population Health, the Harvard School of Public Health, the Johns Hopkins Bloomberg School of Public Health, the University of Tokyo, Imperial College London, and the World Health Organization (WHO)” [1].

This project set out to broadly expand the previous GBD 1990 study, conducted primarily by researchers at the World Health Organization and Harvard, to include nearly 500 experts from around the world [2]. In addition, it generated estimates for more than double the number of diseases and sequelae, and improved methods for estimating disability weights. GBD 2010 resulted in estimated disease risk factors, morbidity, and mortality for 291 diseases and injuries and 1160 sequelae [2].

The Cochrane Database of Systematic Reviews (CDSR) is the leading resource for systemic reviews in health care. The GBD-Cochrane project maps the cause-specific disease burden as established by the GBD study to associated systematic reviews of interventions evaluating the same diseases in CDSR. There are seven completed GBD-Cochrane projects and three active projects [4].

Results
These projects provide high-quality data on systematic reviews and help determine if they poorly or strongly correlate with disease burden. For example, a review of ophthalmologic conditions showed that trachoma, onchocerciasis, vitamin A deficiency, and refraction and accommodation disorders were all underrepresented in the CDSR, while glaucoma, macular degeneration, and other vision loss disorders were overrepresented [5]. Other completed projects have shown poor representation of tropical diseases, while mental health and behavioral conditions are overrepresented [6,7].
Discussion

There are a plethora of reasons a condition might be overrepresented in the CDSR. Overrepresentation might reflect the high prevalence of these conditions and, therefore, greater availability for randomized clinical trials. Alternatively, overrepresentation may reflect a disparity in funding, the disparity in research in high- versus low-income countries, or the prioritized interest of the public and pharmaceutical companies. Underrepresentation may reflect a decreasing disease burden, existing effective interventions for those conditions, or a lack of researchers in low- and middle-income nations where certain conditions are more prevalent.

The active GBD-Cochrane projects include conditions in the realm of heart disease, cancer, and infectious disease. As the GBD-Cochrane project continues to map systematic reviews and protocols against disease burden, we will continue to identify research gaps and opportunities to make informed decisions with future research.

Acknowledgments

MA receives fellowship funding from the Pfizer Global Medical Grant (65894351 and 58858477) Dermatology Fellowship 2022 (principal investigator: RP Dellavalle).

Conflicts of Interest

None declared.

References

2. GBD history. The Institute for Health Metrics and Evaluation. URL: https://www.healthdata.org/gbd/about/history [accessed 2023-06-28]

Abbreviations

CDSR: Cochrane Database of Systematic Reviews
GBD: Global Burden of Disease

Please cite as:
Adelman M, Weber I
Reflecting on Decades of Data: The Global Burden of Disease–Cochrane Project
JMIR Dermatol 2024;7:e41323
URL: https://derma.jmir.org/2024/1/e41323
doi:10.2196/41323
PMID:
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