

Youth Exposure to Spironolactone in TikTok Videos

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The short-form video hosting service TikTok has become a mainstream platform for individuals to share their ideas and educate the public regarding dermatologic diseases such as atopic dermatitis, alopecia, and acne. Users can create and post videos, leave comments, and indicate their interest in or approval of certain content by “liking” videos. In 2022, according to a Pew Research Center survey, approximately 67% of American teenagers aged 13 to 17 years reported using TikTok at least once.¹ This population, along with the rest of its users, are increasing their use of TikTok to share information on dermatologic topics such as acne and isotretinoin.^{2,3} Spironolactone is an effective medication for acne but is not as widely known to the public as other acne medications such as retinoids, salicylic acid, and benzoyl peroxide. Being aware of youth exposure to media related to acne and spironolactone can help dermatologists understand gaps in education and refine their interactions with this patient population.

To gain insight into youth exposure to spironolactone, we conducted a search of TikTok on July 26, 2022, using the term *#spironolactone* to retrieve the top 50 videos identified by TikTok under the “Top” tab on spironolactone. Search results and the top 10 comments for each video were reviewed. The total number of views and likes for the top 50 videos were 6,735,992 and 851,856, respectively.

Videos were subdivided into educational information related to spironolactone and/or skin care (32% [16/50]), discussion of side effects of spironolactone (26% [13/50]), those with noticeable improvement of acne following treatment with spironolactone (20% [10/50]), recommendations to see a physician or dermatologist to treat acne

(10% [5/50]), and other (12% [6/50]). Other takeaways from the top 50 videos included the following:

- Common side effects: irregular periods (10% [5/50]), frequent urination (8% [4/50]), dizziness/lightheadedness (8% [4/50]), and breast tenderness (6% [3/50])
- Longest reported use of spironolactone: 4 years, with complete acne resolution
- Average treatment length prior to noticeable results: 4 to 6 months, with the shortest being 1 month
- Reported dosages of spironolactone: ranged from 50 to 200 mg/d. The most common dosage was 100 mg/d (10% [5/50]). The lowest reported dosage was 50 mg/d (4% [2/50]), while the highest reported dosage was 200 mg/d (2% [1/50])
- Self-reported concurrent use of spironolactone with a combined oral contraceptive: drospirenone–ethinyl estradiol (4% [2/50]), norethindrone acetate–ethinyl estradiol/ferrous fumarate (2% [1/50]), and norgestimate–ethinyl estradiol (2% [1/50])
- Negative experiences with side effects and lack of acne improvement that led to treatment cessation: 8% (4/50).

Even though spironolactone is not as well-known as other treatments for acne, we found many TikTok users posting about, commenting on, and highlighting the relevance of this therapeutic option. There was no suggestion in any of the videos that spironolactone could be obtained without physician care and/or prescription. A prior report discussing youth sentiment of isotretinoin use on TikTok found that popular videos and videos with the most likes focused on the drug’s positive impact on acne improvement, while comments displayed heightened desires to

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learn more about isotretinoin and its side effects.³ Our analysis showed a similar response to spironolactone. In all videos showcasing the skin before and after treatment, there were noticeable improvements in the poster's acne. Most of the video comments displayed a desire to learn more about spironolactone and its side effects. There also were many questions about time to noticeable results. In contrast to the study on isotretinoin,³ the most-liked spironolactone videos contained educational information about spironolactone and/or skin care rather than focusing solely on the impact of the drug on acne. Additionally, the study on isotretinoin found no videos mentioning the importance of seeing a dermatologist or other health care professional,³ while our search found multiple videos (10% [5/50]) on spironolactone that advised seeking physician help. In fact, several popular videos (8% [4/50]) were created by board-certified dermatologists who mainly focused on providing educational information. This difference in educational content may be attributed to spironolactone's lesser-known function in treating acne. Furthermore, the comments suggested a growing interest in learning more about spironolactone as a treatment option for acne, specifically its mechanism of action and side effects.

With nearly 2 billion monthly active users globally and 94.1 million monthly active users in the United States (as of March 2023),⁴ TikTok is a popular social media platform that allows dermatologists to better understand youth sentiment on acne treatments such as spironolactone and isotretinoin and also provides an opportunity for medical education to reach a larger audience. This increased youth insight from TikTok can be utilized by dermatologists to make more informed decisions in developing patient-centered care that appeals to the adolescent population.

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