BURNING TRUTHS:

Confronting Misconceptions About Sunscreen Safety

Featuring insights from Heather Woolery-Lloyd, MD, and Darrell Rigel, MD

As many as 72% of internet users seek healthcare information online.[1] More specifically, patients—and especially the younger ones—may be looking to the social media platform TikTok, which surpassed Google in 2021 as the most popular web domain, for ideas on how to care for their skin. With more than one billion registered users, TikTok has increasingly become a go-to source for individuals seeking health-related information.[2]

The rise of medical misinformation poses a risk when patients rely on social media as a primary source of information. There is increasing evidence that the rise of so-called "skinfluencers" as a major source of skincare content presents challenges for educating the public. Some of these "skinfluencers" may promote behaviors that lead to permanent skin damage. The potential for misinformation may be especially worrisome when it comes to sun safety and skin cancer risks, given that dermatologists are already confronting challenges in educating patients about sun protective measures.

Some creators on TikTok endorse a "highlighter method" of applying sunscreen to create a natural contour from tanning skin, a trend that may increase the risk for skin cancer. Other users have shared tips and hacks for tanning,

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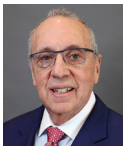

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ONLY 17% OF SUN PROTECTIVE CONTENT ON TIKTOK IS PRODUCED BY BOARD-CERTIFIED DERMATOLOGISTS

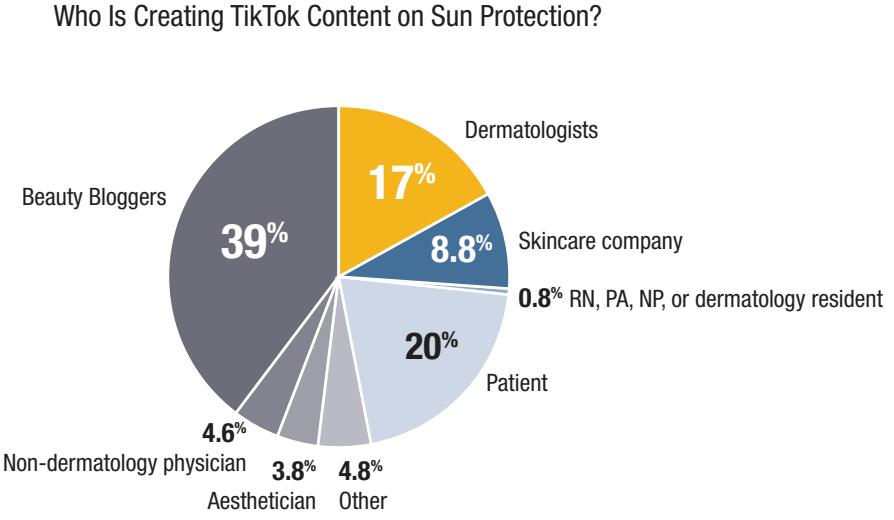

FIGURE 1. Distribution of TikTok videos on sun protection topics by content source in an analysis of 500 videos represented by the hashtags #sunscreen, #sunprotection, #spf, #skincancer, and #skinprotection.

"A recent analysis of content sources on TikTok suggests that, at a minimum, board-certified dermatologists are being left out of the conversation when it comes to sunscreen education, and perhaps more urgently, that the platform may be awash in misinformation regarding sun safety, skin cancer risks, and sunscreen use."

including smearing on baby oil, Vaseline, and even beer before hitting the beach or pool.

Despite the wealth of data showing that regular sunscreen use is protective against the development of skin cancer, one study found that 18.1% of men and 42.6% of women regularly used sunscreen on their face, while 14.3% and 29.9% of men and women, respectively, used sunscreen on both the face and other exposed skin.[3] Such a disconnect demands a rethink about how sun safety messages are conveyed to the public.

THE ROLE OF SOCIAL MEDIA IN SUN SAFETY EDUCATION

Although the increasing popularity of TikTok provides a potential opportunity to reach the public, a recent analysis of content sources on TikTok suggests that, at a minimum, board-certified dermatologists are being left out of the conversation when it comes to sunscreen education, and perhaps more urgently, that the platform may be awash in misinformation regarding sun safety, skin cancer risks, and sunscreen use.[4] In this study, investigators reviewed the top 100 videos for five hashtags (#sunscreen, #sunprotection, #spf, #skincancer, and #skinprotection), and categorized them based on the type of content creator. They found that only 16.6% of sun protection-related TikTok videos were created by board-certified dermatologists, while the majority were created by either beauty bloggers (38.7%) or patients/consumers (33.7%) (Figure 1).

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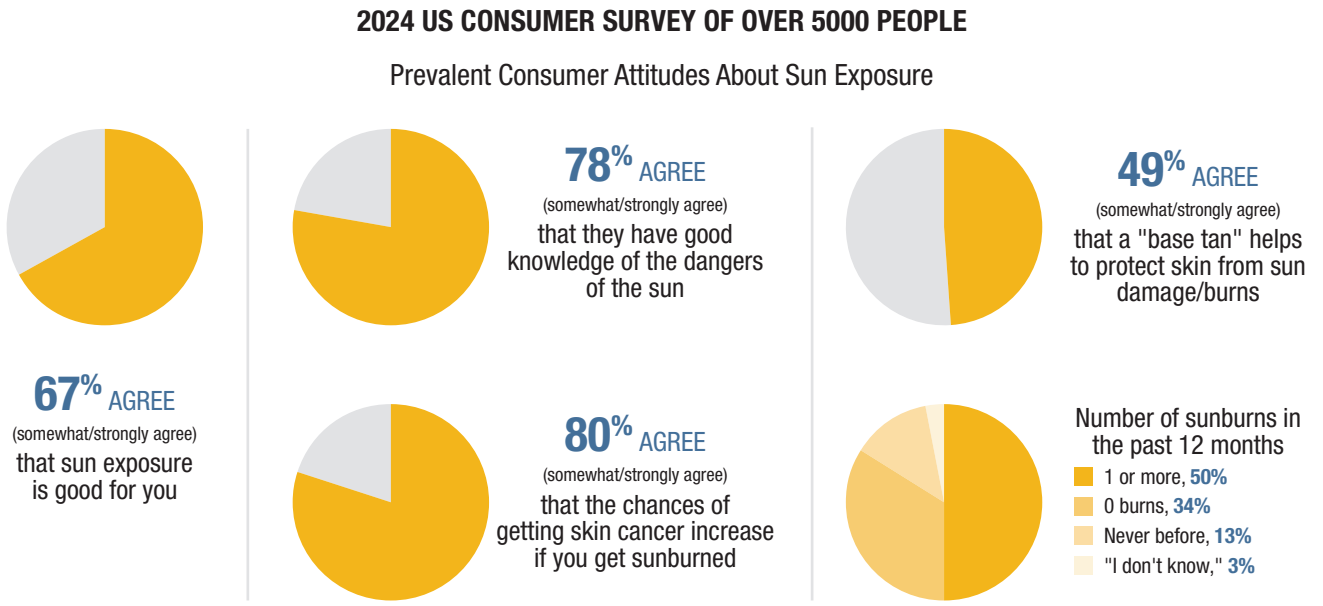

FIGURE 2. Attitudes about sun exposure captured in a survey of over 5,000 people.

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Furthermore, the study found that the 500 videos analyzed garnered 981.5 million views, thereby highlighting the potential reach of the platform. However, 51.8% of those views were held by beauty bloggers, 21.4% by patients/consumers, and just 12.7% were held by board-certified dermatologists. Moreover, board-certified dermatologists were not the top creators for any of the hashtags analyzed, which further emphasizes the challenge of ensuring the availability of reliable and accurate information on the platform.[3]

Data from this study also confirmed that information for individuals with skin of color was sparse, to say the least. Of the 500 videos analyzed, just 16 (3.2%) relayed content specifically to patients with skin of color—10 of these videos were created by beauty bloggers, three by patients, two by board-certified dermatologists, and one by an esthetician.

The main takeaway? "We really need to be more active online as dermatologists…because we need to really increase the number of videos out there, especially about something as important as sun protection," says Dr. Woolery-Lloyd.

CONFRONTING MISCONCEPTIONS ABOUT SUN EXPOSURE

Although the study analyzing TikTok videos has some important limitations, it highlights the potential for the spread of misinformation regarding sun protection habits—and there are certainly some prevalent myths circulating regarding sun safety.

A recent survey on sun exposure attitudes revealed some disturbing trends and startling disconnects.[5] When more than 5,000 people were asked if they had good knowledge of the dangers of the sun, 78% said they felt confident that they did, and 80% agreed that getting a sunburn increased the chances of getting skin cancer. However, two-thirds of respondents felt that sun exposure was good for them, and nearly half thought that getting a "base tan" was protective against sun damage and burns (Figure 2).

These data underscore the delicate balance needed to educate the public regarding sun exposure. On the one hand, sunlight is a major source of vitamin D, which is crucial for calcium absorption and maintaining strong bones; vitamin D also has a role in immune function and may protect against certain cancers and chronic diseases.[6] Sun exposure has also been linked to benefits for mood, including lowering the risk of depression. Yet, patients need to be protected from burns and skin cancer—and certainly there is a disconnect if patients believe that achieving a base tan is in any way beneficial for warding off the risk of skin cancer.

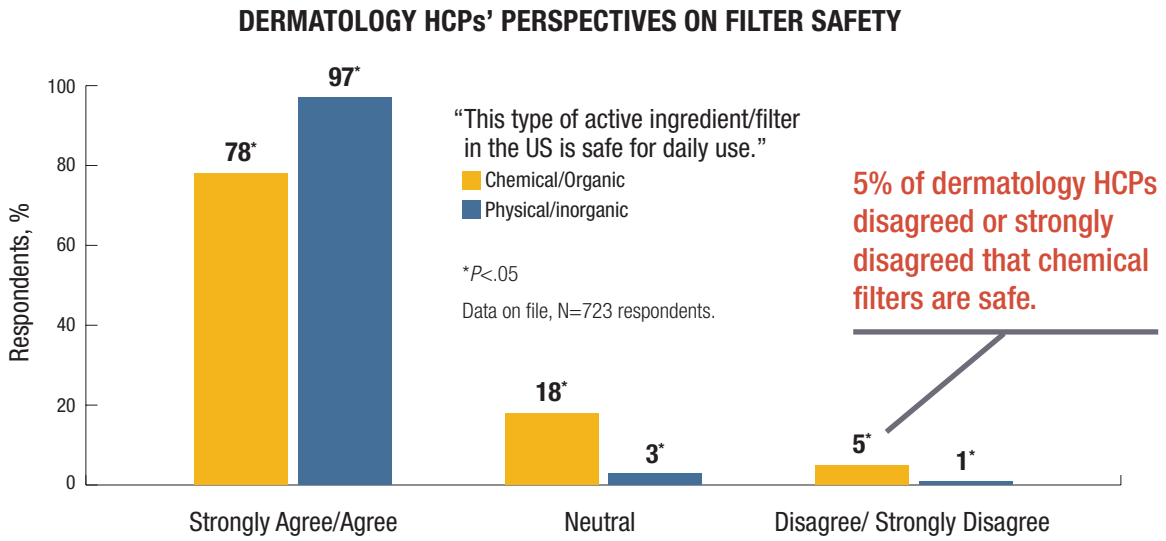

FIGURE 3. Results from a survey of dermatology health care providers (including dermatologists, physicians assistants, and nurse practitioners) suggest misconceptions about filter safety are prevalent.

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CONCLUSION

Not all misconceptions about sun safety are just patient-centric. A recent study examined dermatology healthcare professionals' (HCPs) views on sunscreen safety.[7] It revealed that while most HCPs agreed that inorganic (physical) sunscreens are safe, about 20% were unsure about the safety of chemical (organic) sunscreens (Figure 3). Surprisingly, 5% disagreed that chemical filters are safe, despite decades of supporting safety data. This highlights a knowledge gap and the impact of misinformation, possibly from the internet or patients.

Taken together, the emerging data on sun safety attitudes suggest dermatologists need to do even more when it comes to educating the public, especially with regard to advocating for regular sunscreen use. Currently, the voice of the dermatology community is missing from social media platforms like TikTok, leaving patients at risk of acquiring misinformation that leads to dangerous behaviors. This lack of reliable information may be fueling popular myths, such as the belief that acquiring a "base tan" protects against future burns. More and better education is urgently needed to help patients lower the risk of participating in unhealthy skin habits that perpetuate the potential for developing skin cancer.

Download the Burning Truths Podcast Now

https://thedermdigest.com/burning-truths-exposing-sunscreen-misconceptions-for-better-protection/

"Misinformation has impact both on the public as well to some extent on our colleagues," Dr. Rigel says. "I learned from this that maybe we ought to really make our education more focused, more effective to our colleagues and to the public to get the truths out there and get rid of these myths…that exist about sunscreen." **JDNPPA**

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