

# Exploring the Scope of Melanoma Educational Content on Instagram

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## INTRODUCTION

The American Cancer Society estimates a 7.3% increase in new melanoma cases in 2024 and a 3.8% rise in mortality.<sup>1</sup> According to SEER data, melanoma incidence rates are lowest in non-Hispanic Blacks.<sup>2</sup> However, Black, Asian or Pacific Islander, and American Indian/Alaskan Native races are associated with worse overall survival, highlighting significant health inequities and greater need for public education.<sup>3</sup> As the internet and social media have become dominant sources of health-related information, social media platforms may help address educational gaps.<sup>4</sup> However, the scope and quality of melanoma-related educational content available, particularly regarding Skin of Color (SOC), remain largely unexplored. This study aims to evaluate the melanoma educational content on Instagram and assess its representation of SOC.

On August 31st, 2024, we searched Instagram using the hashtag #melanoma. Posts were manually reviewed and excluded if not in English, unrelated to melanoma education, or targeted specialized health professionals. We evaluated 100 posts, including the top 10 most popular and 90 most recent posts. We analyzed educational content and depicted racial/ethnic groups. Posts were categorized into medical (dermatologists, dermatology clinics, physician assistants, nurses, laser specialists, and hospitals) or non-medical (nonprofit organizations, health/beauty, and personal accounts). Two-tailed Z-tests were conducted to compare SOC content. Statistical significance was defined as  $P < 0.05$ .

Our search yielded 432,128 posts. Among the 100 posts analyzed, 11 were from dermatologists, 29 from other medical professionals, and 60 from non-medical accounts. The most frequently posted educational content included the ABCDEs (Asymmetry, Border, Color, Diameter, Evolution) (34%), melanoma definitions (32%), and melanoma risk factors (28%). Only 16% and 3% of posts recommended skin self-examinations (SSE) and partner-assisted examinations, respectively. None of these posts included visual aids for performing SSE.

Only 3% of posts depicted melanoma in Fitzpatrick skin types IV-VI. Twelve posts discussed melanoma in SOC, with 8 (66.67%) from medical accounts and 4 (33.33%) from non-medical accounts. Medical accounts were significantly more likely to address melanoma in SOC ( $P = 0.043$ , Z-score = 2.02).

Limitations include the small sample size, exclusion of non-English posts, convenience sample of recent posts, and variability in Instagram's algorithm.

As melanoma incidence and mortality continue to rise, early detection is essential for improving patient outcomes. SSE is a key aspect of early detection and has been shown to be associated with decreased tumor thickness at diagnosis.<sup>5</sup> Partner-assisted exams are also effective, with trained partners identifying 81% of melanomas.<sup>5</sup> Despite these clear benefits, only 16% and 3% of posts mentioned SSE and partner-assisted exams respectively, revealing a concerning lack of educational content on these practices.

Our results also reveal a significant lack of racial representation of melanoma on Instagram. While medical accounts are more likely to mention melanoma in SOC, only 3% of posts featured images of melanoma in SOC. This lack of representation may hinder awareness and early detection efforts in higher-risk populations.

Dermatologists and other health professionals should emphasize the importance of SSE, partner-assisted exams, and the occurrence of melanoma in darker skin types in educational posts. The lower incidence yet worse overall survival for SOC populations should also be acknowledged. By posting more intentionally on social media platforms, medical professionals can improve public education and promote early detection efforts, particularly among ethnic minorities.

## DISCLOSURES

There are no potential conflicts of interest or competing interests to disclose.

## REFERENCES

1. American Cancer Society. Cancer Facts and Figures 2024. <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2024/cancer-facts-and-figures-acs.pdf>.
2. Costello CM, Dusza SW, Marghoob AA, et al. Melanoma screening and public education for minority populations in the United States. *J Am Acad Dermatol*. 2024;90(1):212-213.
3. Joshi P, Ogoburo I, Hernandez A, et al. Racial and ethnic minorities in lower income brackets are associated with late-stage diagnosis of non-ocular melanoma. *Cancer Epidemiol*. 2023;87:102489.
4. Basch CH, Basch CE, Hillyer GC, et al. Social media, public health, and community mitigation of COVID-19: challenges, risks, and benefits. *J Med Internet Res*. 2022;24(4):e36804.
5. Ingrassia JP, et al. Re-examining melanoma secondary prevention and the role of skin self-examination. *J Am Acad Dermatol*. 2023;89(5):1085-1086.

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