

# The Impact of Photo Editing on Dermatological Perceptions in Skin of Color

Radhika Misra<sup>1</sup>, Alejandra Sataray-Rodriguez<sup>2</sup>, Bret-Ashleigh Coleman<sup>3</sup>,  
Chinecherem Chime-Eze<sup>4</sup>, Christina Tolete<sup>5</sup>, Barda Haghghat<sup>6</sup>, John Monroe<sup>7</sup>,  
Guang Orestes<sup>8</sup>, Christina Randolph<sup>9</sup>, Kelly Frasier<sup>10</sup>

<sup>1</sup>College of Osteopathic Medicine, Des Moines University, West Des Moines, IA, USA

<sup>2</sup>School of Medicine, University of Nevada, Reno, NV, USA

<sup>3</sup>Edward Via College of Osteopathic Medicine, Auburn University, Auburn, AL, USA

<sup>4</sup>Department of Pediatrics, University of North Carolina, Chapel Hill, NC, USA

<sup>5</sup>School of Medicine, George Washington University, Washington, DC, USA

<sup>6</sup>College of Osteopathic Medicine, California Health Sciences University, Clovis, CA, USA

<sup>7</sup>Norton College of Medicine, Upstate Medical University, Syracuse, NY, USA

<sup>8</sup>Kirk Kerkorian School of Medicine at UNLV, Las Vegas, NV, USA

<sup>9</sup>Medical College of Georgia, Augusta University, Augusta, GA, USA

<sup>10</sup>Department of Dermatology, Northwell Health, New Hyde Park, NY, USA

Email: [kellymariefrazier@gmail.com](mailto:kellymariefrazier@gmail.com)

**How to cite this paper:** Misra, R., Sataray-Rodriguez, A., Coleman, B.-A., Chime-Eze, C., Tolete, C., Haghghat, B., Monroe, J., Orestes, G., Randolph, C. and Frasier, K. (2025) The Impact of Photo Editing on Dermatological Perceptions in Skin of Color. *Journal of Biosciences and Medicines*, 13, 435-449.  
<https://doi.org/10.4236/jbm.2025.132033>

**Received:** January 4, 2025

**Accepted:** February 23, 2025

**Published:** February 26, 2025

Copyright © 2025 by author(s) and Scientific Research Publishing Inc.  
This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

---

## Abstract

The pervasive use of photo editing applications such as Photoshop and FaceTune has significantly altered societal beauty standards, particularly for individuals with skin of color, often leading to unrealistic expectations regarding skin appearance and health. These tools allow users to smooth skin textures, lighten skin tones, and erase imperfections, perpetuating Eurocentric beauty ideals that frequently marginalize the natural diversity of skin tones and textures. Consequently, individuals with skin of color may seek dermatological interventions—such as skin lightening treatments, aggressive acne scar revisions, and other cosmetic procedures—aimed at achieving appearances that align more closely with digitally manipulated images. This pursuit of an unattainable aesthetic can result in increased dissatisfaction with common skin conditions like hyperpigmentation and keloids, which are often misrepresented in edited photos. Additionally, the psychological impact of these alterations can exacerbate feelings of inadequacy, contributing to conditions such as anxiety and body dysmorphic disorder. Dermatologists face the dual challenge of addressing patients' clinical needs while also managing their expectations shaped by digital enhancements. To combat this, it is essential for dermatologists to integrate patient education that emphasizes the beauty of diverse skin tones and the discrepancies between digital images and authentic

---

skin health. By fostering an understanding of realistic outcomes and promoting the acceptance of natural skin characteristics, dermatologists can empower individuals with skin of color to prioritize authentic skin health over digitally influenced ideals, ultimately leading to more satisfying dermatological care and improved self-image.

### Keywords

Skin of Color, Colorism, Photo Editing Applications, Eurocentric Beauty Standards, Hyperpigmentation, Keloids, Body Dysmorphic Disorder, Digital Image Manipulation, Dermatological Patient Education, Authentic Skin Health

---

## 1. Introduction

Certain features—such as facial symmetry, skin homogeneity, and a youthful appearance—are universally perceived as attractive, yet beauty standards have varied significantly across cultures, reflecting unique physical traits valued by each society. However, with the rise of social media, these culturally distinct ideals are increasingly converging into a globalized standard, which is heavily influenced by Western and Eurocentric features [1]. This phenomenon highlights how beauty perceptions are influenced not only by individual or cultural preferences but also by global trends, which increasingly shape personal self-image and standards of attractiveness.

Photo editing applications like Adobe Photoshop and FaceTune have become common tools social media users utilize to modify facial features, skin tone, and body shape in photos. Especially with the rise of face filters on platforms like Instagram, TikTok, and Facebook, it has become easier to dramatically alter one's appearance—changing eye or hair color and even reshaping features like the nose or jaw to match idealized beauty standards. These applications have transformed beauty norms, with edited images now saturating online spaces and setting new expectations that emphasize symmetry, flawlessness, and specific physical traits, including lighter skin tones.

The privileging of lighter skin as an aesthetic ideal reflects societal biases that have been systematically documented in psychological and sociological research. Empirical studies consistently reveal a tendency to associate lighter skin tones with favorable attributes, a bias that is particularly pronounced among individuals with lighter complexions themselves [2]. This preference for lighter skin transcends racial and ethnic boundaries, manifesting across diverse populations [3]. A widely utilized tool for investigating these implicit biases is the Implicit Association Test (IAT), which evaluates the cognitive strength of associations between images of light- and dark-skinned faces and words with positive or negative connotations. By measuring response times to specific pairings, the IAT provides a robust metric for assessing subconscious biases [2] [4]. Collectively, these findings underscore the pervasive and deeply ingrained nature of color-based biases in

shaping perceptions of physical appearance.

For individuals with skin of color, the pervasive influence of photo editing and social media-driven beauty standards poses significant challenges, as they often face underrepresentation and systemic colorism within digital spaces. Western beauty ideals—frequently promoting lighter skin tones and Eurocentric features—are further magnified by editing tools that facilitate skin lightening and facial modification [5]. Online retail imagery reflects these biases, favoring lighter-skinned models and perpetuating colorism through post-production practices that lighten skin tones in photographs compared to videos [6]. As a result, individuals with skin of color may feel pressured to pursue dermatological interventions, such as skin-lightening treatments, aggressive acne scar revisions, and other cosmetic procedures, in an effort to align their appearance with digitally altered images. This trend not only reinforces colorist biases but also imposes restrictive beauty standards that disregard and devalue diverse appearances. Over time, these digitally edited ideals can erode self-esteem, undermine personal identity, and contribute to body dissatisfaction, self-concept ambiguity, and mental health challenges [7]. Addressing these impacts is essential for fostering a more inclusive and authentic representation of beauty that embraces the diversity of skin tones and features.

## 2. The Influence of Photo Editing on Beauty Standards

The rise of photo editing on social media has significantly altered contemporary beauty standards, creating an environment where digitally enhanced images dominate public perception. Nowadays, many users employ photo-editing applications to enhance their appearance by smoothing skin, removing blemishes, and reducing wrinkles. These enhancements contribute to a distorted view of beauty, leading to unrealistic expectations regarding physical appearance [8]. This distortion not only impacts individual self-image but also reinforces a societal ideal that equates beauty with an unrealistic, polished appearance. Moreover, the cultural implications suggest that natural attributes—such as pores, freckles, and fine lines—are viewed as imperfections that require correction. As individuals increasingly feel pressured to conform to this narrow definition of beauty, they may experience significant psychological distress. Ultimately, the prevalence of photo editing fosters an environment where authenticity is sacrificed in favor of an unattainable ideal, raising concerns about mental health and self-worth.

Photo editing applications, beyond promoting a narrow view of beauty, exacerbate issues related to racial and ethnic representation, particularly for individuals with darker skin tones. These tools often favor lighter skin tones, reinforcing a global beauty standard that marginalizes and diminishes the representation of diverse skin colors. This preference not only undermines the inherent beauty of diverse skin tones but also perpetuates systemic biases that can lead to internalized racism among individuals whose natural features do not align with these edited ideals [9]. The pressure to conform to Eurocentric beauty standards may lead

some individuals to seek skin-lightening treatments, despite limited awareness of the potential risks associated with these products. Common ingredients in skin-lightening creams can cause severe skin damage, adverse reactions, or long-term health issues [10]. Furthermore, the editing of facial features, such as narrowing noses and enlarging eyes, can further entrench Eurocentric beauty standards within mainstream culture. The visual narrative presented on social media becomes increasingly homogenized, sidelining the unique characteristics that contribute to the rich diversity of human beauty. As a result, individuals may feel compelled to alter their appearances, which not only affects their self-esteem but also perpetuates societal biases regarding beauty.

The globalization of Eurocentric beauty ideals through social media intensifies the pressure on individuals from various backgrounds to conform to these narrow definitions of attractiveness. Research by Nelson *et al.* (2018) indicates that many users, whether consciously or unconsciously, adopt beauty practices that align with these Eurocentric features [11]. This phenomenon fosters an environment where authenticity is often overshadowed by the desire for conformity, leading to a homogenization of beauty standards across cultures. As edited images become the norm, diverse beauty representation significantly diminishes, resulting in the underrepresentation of individuals with darker skin tones and unique features. This lack of diversity perpetuates stereotypes and reinforces cultural biases, diminishing the appreciation for the individuality of natural appearances. The impact of social media is further compounded by the effects of continuous comparison, which can lead to feelings of isolation for those who do not fit the edited mold [12]. As a result, many individuals may struggle to embrace their unique traits, feeling pressured to conform to the prevailing beauty standards that dominate social media platforms.

Intersecting identities, such as gender, socioeconomic status, and ability, significantly influence how individuals engage with photo editing technologies and perceive beauty standards [13]. For example, women from marginalized communities often experience compounded pressures to conform to dominant beauty ideals, while individuals with disabilities face unique challenges, including limited representation of their appearances in media and digital spaces [14]. Applying an intersectional lens to these issues provides valuable insights into how systemic inequalities shape beauty perceptions and contribute to feelings of inadequacy. As a result, many individuals struggle to embrace their unique traits, feeling compelled to conform to the pervasive beauty standards prevalent on social media platforms.

The promotion of narrow beauty ideals through photo editing tools restricts individuality and fosters a culture of insecurity. While photo editing may be perceived as a harmless form of enhancement, it cultivates a dangerous narrative equating beauty with perfection and discouraging the celebration of unique appearances. The societal implications of these standards extend beyond aesthetics, affecting self-worth and perpetuating cultural biases. Recognizing the detrimental effects of these edited standards is crucial to advocating for a broader representation

of beauty that embraces all forms, colors, and textures. By integrating an intersectional lens and challenging the dominance of digitally crafted beauty ideals, we can promote a more inclusive understanding of beauty that honors the diversity of human experiences and encourages individuals to appreciate their authentic selves.

### 3. Dermatological Requests Among Individuals with Skin of Color

Dermatologists are seeing increased requests among individuals with skin of color for skin-lightening treatments, aggressive acne scar revisions, and requests for other cosmetic procedures, all of which require special consideration and expertise to address the unique needs of these patients [15]. The demand for nonsurgical cosmetic dermatological procedures has risen significantly since 1995, with ethnically oriented procedures experiencing especially rapid growth—a 13% increase from 2006 to 2007, compared to an overall 7% increase [16] [17]. By 2017, 32% of these procedures were performed on racial and ethnic minorities, further highlighting this trend [18]. According to the statistics published by the American Society of Plastic Surgeons, there has been an increase in the proportion of aesthetic treatments requested by people with skin of color, from 16% to 34% of the total patient population, from 2004 to 2020 [19] [20]. There has also been an increase in the trend of unverified home remedies for skin-lightening on social media, and many of these trends lack robust scientific evidence and have potential safety risks [21]. The rise of social media as a primary source of skin care advice has further contributed to misinformation, emphasizing the need for dermatologists to actively engage on these platforms to bridge the gap by providing accessible, inclusive, and accurate information online to ensure safe and effective skin-care for diverse skin types.

The demand for skin-lightening treatments has been increasing globally driven by the interplay of cultural, social, and political associations between lighter skin tones and perceptions of beauty and privilege [22]-[24]. Reflecting this demand, the global market for skin-lightening products and procedures is projected to grow substantially, from \$8.8 billion USD to \$15.7 billion USD by 2030, with particular concentration in regions of higher melanin prevalence [25]. This trend is heavily influenced by sociocultural factors, including entrenched beauty standards, media portrayals, and social pressures. However, there seems to be a lack of dermatological consultations regarding the use of these products. Daftary *et al.* (2023) found that while 21.3% of respondents reported using skin-lightening agents, only 22.6% of these individuals sought medical advice or dermatological consultation before beginning treatment [9]. This lack of professional guidance poses significant health risks, as individuals may unknowingly expose themselves to unsafe, unregulated product formulations that are prevalent in the skin-lightening market.

A significant driver behind the trend in skin-lightening treatments among individuals with skin of color is the prevalence of hyperpigmentation, including

conditions like melasma and post-inflammatory hyperpigmentation, which disproportionately affect those with darker skin tones [26]. Curated images that are digitally altered showcasing even-tone skin that is lighter can exacerbate the emotional impact of hyperpigmentation, fueling the desire to seek treatment to conform to these unattainable standards. This demand has led to the widespread use of prescription products like hydroquinone, triple combination creams, and over-the-counter solutions, often without full awareness of their potential risks [26]. This demand is not only evident among women of color, who account for 80% of worldwide skin-lightening product sales, but also across regions with large skin-of-color populations [25]. In African and Caribbean countries, terms like “skin whitening”, “skin lightening” and “skin bleaching” are frequently searched [27] [25]. In India, 61% of the skincare market is dominated by skin-lightening products, while 77% of Nigerian women report using such treatments [28]. Interestingly, a survey in Benin City, South Africa, revealed that only 2.5% of respondents were influenced by cost, suggesting that cultural and societal pressures play a greater role in driving demand [29].

Another prevalent concern among individuals with skin of color is acne vulgaris, which, while common across ethnicities, poses unique risks of keloid scarring and post-inflammatory hyperpigmentation in these populations [30]. These physical concerns, compounded by social media’s portrayal of filtered, flawless skin, contribute to a rise in requests for aggressive acne scar revisions [31]. Photo editing on social media leaves little room for natural skin variations, especially for people with skin of color with increased risks of developing cosmetically distressing hyperpigmentation and scarring, heightening the demand for aesthetic treatments. Numerous studies have linked social media use with worsened psychiatric health in those with visible skin lesions including acne in both adolescents and adults [32]-[34]. This highlights the biopsychosocial burden of conforming to Eurocentric beauty ideals that disproportionately affect those with skin of color. The trend emphasizes the need for an inclusive and patient-centered treatment approach from dermatologists to promote realistic beauty standards in socially vulnerable populations, many of whom are those with skin of color.

Beyond skin-lightening and scar revision, individuals with skin of color increasingly request other cosmetic procedures, including neurotoxins, fillers, laser treatments, chemical peels, and body contouring [35]. While these procedures can be safely performed with appropriate precautions, they carry a heightened risk of hyperpigmentation and scarring for these individuals, which can create a challenging cycle of seeking further treatment to address complications. This cycle, perpetuated by unrealistic ideals, emphasizes the need for dermatologists to guide patients in setting healthy, realistic expectations. By promoting natural skin health and authentic variations, dermatologists can empower individuals with skin of color to make well-informed decisions about their aesthetic goals, thus reducing the burden of over-treatment and enhancing the quality of patient care.

The broader implication of dermatological treatments and services is the need

for dermatologists to receive adequate and inclusive training in evaluating and managing skin concerns in people with skin of color. This includes understanding the complex interplay of social, cultural, racial, and socioeconomic factors, particularly as the rise of photo-editing applications reshapes beauty standards. Customized therapeutic strategies should be developed to address the unique structural and functional properties of melanated skin. As patients increasingly prioritize their treatment goals, dermatologists must continually adapt by enhancing cultural competence and respecting diverse beauty norms. This approach ensures that the aesthetic and medical needs of patients with skin of color are met while promoting equity, inclusivity, and patient-centered care.

#### **4. Psychological Implications of Altered Perceptions**

Increasing reliance on photo-editing applications has contributed to a notable shift in perceptions of dermatological self-worth and satisfaction. The modification of skin characteristics—such as tone, texture, and blemish visibility—leads to a phenomenon where individuals experience feelings of inadequacy regarding their natural skin attributes, largely driven by comparisons to highly edited, idealized images on social media platforms [36] [37]. This digital landscape encourages an idealization of perfection that is both difficult to attain in reality and detrimental to users' self-esteem and skin satisfaction. MacCallum and Widdows (2018) describe this phenomenon as a cycle of self-comparison, wherein individuals continually measure their appearance against edited standards, often resulting in diminished self-esteem and satisfaction with one's natural attributes [39]. This pressure can push individuals, especially those in vulnerable populations, toward seeking cosmetic procedures or engaging in unhealthy practices to replicate the perfection they see online [40]. The normalization of these unrealistic standards can exacerbate body dysmorphic tendencies and lead to persistent dissatisfaction, anxiety, and even harmful beauty practices, underscoring the need for greater awareness of the psychological impacts of these altered perceptions.

Studies have linked the pursuit of an idealized image, frequently reinforced by edited social media photos, to a decrease in self-confidence and satisfaction with natural skin features [42]. Although the body of research focused on photo editing regarding skin appearance is limited, we can draw parallels from research exploring online self-presentation. Research on self-presentation suggests that online users who engage in deliberate, intentional self-presentation tend to experience lower self-concept clarity than those who do not engage in this calculated behavior [43]. This curated self-presentation closely aligns with the way users edit photos to craft a specific online identity, potentially impacting how they perceive themselves.

This continuous cycle of photo-editing and self-presentation has been shown to carry substantial mental health implications. A growing body of research indicates a positive association between photo editing and mental health disorders such as body dysmorphic disorder, anxiety, and depression [44]-[46]. This

emphasizes the negative feedback loop where the dissatisfaction that arises from such comparisons intensifies the motivation to engage in additional photo-editing and self-presentation adjustments. This loop contributes to the development of distorted body image and a skewed understanding of dermatological health, as individuals increasingly rely on visual modifications to achieve an idealized appearance. The psychological burden of these disorders is not merely superficial; they are associated with impaired quality of life, reduced self-esteem, and pervasive negative self-assessments [39]. In vulnerable populations, such as adolescents and individuals with pre-existing mental health concerns, the impact may be even more pronounced, heightening the risk for persistent mental health challenges.

## 5. Challenges Faced by Dermatologists

Dermatologists face increasing challenges as social media and photo-editing applications fuel unrealistic patient expectations for flawless skin. The widespread use of image enhancement tools has led some patients to view edited appearances as their baseline, a phenomenon known as “Snapchat dysmorphia”, where individuals seek cosmetic interventions to emulate digitally altered features [47]. This shift in perception pressures dermatologists to bridge a significant gap between the idealized outcomes patients desire and what is clinically feasible. Managing these expectations requires dermatologists to address both the technical aspects of treatment and the psychological impacts of beauty standards, which often drive patients toward unattainable goals [15].

The psychological dimensions of beauty perceptions significantly influence patients’ satisfaction with dermatologic treatments and their understanding of outcomes. With the growing influence of altered online images, patients often approach dermatology with preconceived ideals, shaped by unrealistic standards. Addressing mental well-being as a component of dermatologic care allows practitioners to recognize issues like body dysmorphic disorder, where individuals may seek repeated or excessive treatments based on distorted self-perceptions [48]. Dermatologists who assess both the physical and psychological factors behind a patient’s request can better align treatment approaches with realistic expectations, ultimately improving patient satisfaction and fostering long-term trust [49]. A customized, patient-centered approach can bridge the gap between desired outcomes and achievable results, positioning dermatologists not just as medical providers but as partners in helping patients cultivate healthy, balanced beauty ideals.

Communication is central to building a trusting patient-physician relationship, particularly for managing expectations around aesthetic treatments. By engaging patients with open-ended questions and providing a supportive space, dermatologists encourage patients to share any emotional or psychological factors—such as the impact of digitally altered images—that may influence their perceptions of beauty. Transparent communication around potential outcomes, procedural risks, and the dermatologist’s clinical experience is essential, particularly for

patients with skin of color, who may face a higher risk of pigmentation changes or scarring from treatments like chemical peels and laser therapies [50]. Addressing these factors openly helps clarify misconceptions, enhances satisfaction, and supports positive experiences within dermatologic care.

Emerging technologies, especially artificial intelligence, offer new possibilities for personalized dermatologic care. AI-based applications such as predictive modeling and skin analysis may assist in providing patients with more accurate representations of expected treatment outcomes for procedures like fillers and laser therapies [51]. For patients with skin of color, however, a gap persists in the availability of diverse clinical imagery, which can make it difficult to visualize how treatments may appear on different skin tones. While dermatologists should strive to source or develop inclusive, clinically accurate imagery, AI models present a promising solution to bridge this gap, potentially allowing for more representative and accessible resources that reflect the diversity of patient skin types.

These strategies, incorporating psychological assessments, open communication, transparency, and technological advancements, equip dermatologists to manage patient expectations and enhance the patient experience. By embracing a holistic approach to care, dermatologists can support realistic beauty standards, promote positive self-image, and ultimately foster well-being in diverse patient populations, particularly for individuals with skin of color who may face unique dermatologic challenges and cultural pressures.

## **6. Integrating Patient Education into Dermatological Practice**

Promoting the acceptance of diverse skin tones and textures is essential in dermatology, where patient education serves as a vehicle to combat harmful beauty standards. With more dermatologists embracing roles as content creators, these professionals have unique platforms to advocate for inclusive beauty standards that represent a spectrum of skin tones and textures. However, much of the online content addressing skin of color originates from individuals without professional training, which can perpetuate misinformation and amplify unrealistic expectations about dermatologic treatments [52]. Dermatologists are positioned to correct these narratives by providing evidence-based education about the natural diversity of skin and dispelling the myths that favor Eurocentric ideals, such as the preference for lighter skin and smooth textures as markers of beauty [53]. Addressing colorism and the lack of representation of diverse skin types in mainstream media, dermatologists can guide patients to appreciate the intrinsic beauty of their unique skin tones and textures. By providing accurate information and fostering a supportive environment, dermatologists can empower patients to reject societal pressures and develop a more balanced self-perception that values unaltered, authentic beauty.

Providing patients with evidence-based information on realistic treatment outcomes is an essential part of dermatologic care, especially in light of the influence of edited images on patient expectations [54]. Many patients come to consultations

with idealized expectations shaped by these highly altered images, often hoping for flawless results that may not be feasible in clinical practice. By presenting factual information on what dermatologic treatments can realistically achieve, dermatologists help set practical expectations and support informed decision-making. A key component of this educational approach involves using images that represent a diverse range of skin tones, as conventional dermatologic resources often lack sufficient visual representation for patients with skin of color [55]. This gap in inclusive resources can hinder patients' ability to fully understand potential treatment outcomes for their specific skin types. While digital platforms such as VisualDx provide a compilation of disease states with images of skin of color, dermatologists should also consider creating their own personalized "toolkit" of real-life before-and-after photos [55]. These photos can offer a more relatable and realistic perspective, helping patients better visualize expected outcomes tailored to their needs.

Patients with skin of color may also face specific considerations, such as increased risks of hyperpigmentation or scarring, which call for transparent conversations about possible side effects and realistic treatment timelines [56]. Dermatologists can emphasize that many dermatologic treatments produce gradual improvements rather than instant changes, helping to mitigate disappointment and promote patient satisfaction as they observe steady progress. Given the complexity of some patients' treatment goals, providers should integrate motivational interviewing techniques to explore the underlying motivations driving a patient's desire for treatment. This approach enables dermatologists to address misconceptions, such as the belief that lighter skin is inherently more attractive or socially desirable, while fostering trust and collaboration. By uncovering these deeper motivations, providers can help patients establish more realistic and achievable treatment goals [57]. Through clear communication of potential outcomes, addressing gaps in visual representation, and building strong patient-provider relationships, dermatologists play a pivotal role in helping patients navigate their expectations and embrace their natural beauty within a digitally influenced landscape.

## 7. Conclusion

In conclusion, addressing the impact of photo editing applications on dermatological perceptions of self in skin of color is crucial for fostering healthier self-images among patients. These applications often perpetuate unrealistic beauty standards. The psychological and dermatological implications are significant, highlighting the need for dermatologists to advocate for realistic beauty standards and attenuate the impact of these applications on mental health. By promoting authentic skin health over digital perfection, dermatologists can play a vital role in managing expectations and encouraging a focus on healthy skin. Furthermore, advocating for diversity and inclusion in beauty standards is essential in creating a more inclusive definition of beauty that reflects all individuals. This is particularly important due to the negative impact of some dermatological interventions

such as skin lightening treatments on the overall health status of individuals with skin of color who are already facing significant health disparities. As trusted physicians, dermatologists are uniquely positioned to lead this change and should take up the charge, ultimately helping patients embrace their natural selves and enhancing their overall well-being.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

## References

- [1] Dimitrov, D. and Kroumpouzou, G. (2023) Beauty Perception: A Historical and Contemporary Review. *Clinics in Dermatology*, **41**, 33-40. <https://doi.org/10.1016/j.clindermatol.2023.02.006>
- [2] Nosek, B.A., Smyth, F.L., Hansen, J.J., Devos, T., Lindner, N.M., Ranganath, K.A., Tucker Smith, C., Olson, K.R., Chugh, D., Greenwald, A.G. and Banaji, M.R. (2007) Pervasiveness and Correlates of Implicit Attitudes and Stereotypes. *European Review of Social Psychology*, **18**, 36-88. <https://doi.org/10.1080/10463280701489053>
- [3] Nosek, B.A., Banaji, M.R. and Greenwald, A.G. (2002) Harvesting Implicit Group Attitudes and Beliefs from a Demonstration Web Site. *Group Dynamics: Theory, Research, and Practice*, **6**, 101-115. <https://doi.org/10.1037/1089-2699.6.1.101>
- [4] Greenwald, A.G., McGhee, D.E. and Schwartz, J.L.K. (1998) Measuring Individual Differences in Implicit Cognition: The Implicit Association Test. *Journal of Personality and Social Psychology*, **74**, 1464-1480. <https://doi.org/10.1037/0022-3514.74.6.1464>
- [5] Ellis, N.P. and Destine, S. (2023) Color Capital: Examining the Racialized Nature of Beauty via Colorism and Skin Bleaching. *Sociology Compass*, **17**, e13049. <https://doi.org/10.1111/soc4.13049>
- [6] Butkowski, C., Humphreys, L. and Mall, U. (2022) Computing Colorism: Skin Tone in Online Retail Imagery. *Visual Communication*, **23**, 289-308. <https://doi.org/10.1177/14703572221077444>
- [7] Felig, R.N. (2020) Editing the Self Away: The Effects of Photo Manipulation on Perceptions of the Self. Master's Thesis, University of South Florida. <https://digitalcommons.usf.edu/etd/8195/>
- [8] Elias, A.S. and Gill, R. (2018) Beauty Surveillance: The Digital Self-Monitoring Cultures of Neoliberalism. *European Journal of Cultural Studies*, **21**, 59-77. <https://doi.org/10.1177/1367549417705604>
- [9] Daftary, K., Poondru, S., Patel, N., Shramuk, M., Muhammad, L., and Kundu, R.V. (2023) Colorism Attitudes and Use of Skin Lightening Agents in the United States. *International Journal of Women's Dermatology*, **9**, e092. <https://doi.org/10.1097/IJW9.0000000000000092>
- [10] Chen, J., Ishii, M., Bater, K.L., Darrach, H., Liao, D., Huynh, P.P., Reh, I.P., Nellis, J.C., Kumar, A.R. and Ishii, L.E. (2019) Association between the Use of Social Media and Photograph Editing Applications, Self-Esteem, and Cosmetic Surgery Acceptance. *JAMA Facial Plastic Surgery*, **21**, 361-367. <https://doi.org/10.1001/jamafacial.2019.0328>
- [11] Nelson, S.C., Kling, J., Wängqvist, M., Frisén, A. and Syed, M. (2018) Identity and the Body: Trajectories of Body Esteem from Adolescence to Emerging Adulthood.

- Developmental Psychology*, **54**, 1159-1171. <https://doi.org/10.1037/dev0000435>
- [12] Sejdiu, Z., Stitzlein, E., Rieder, E.A., Andriessen, A., Greenberg, J.L., Oza, V.S., Cutler, V., Gonzalez, M.E., Lio, P., Love, E.M., Park, J., Andriessen, H. and Phillips, K.A. (2024) Appearance Dissatisfaction and Body Dysmorphic Disorder in the Dermatology Patient. *Journal of Drugs in Dermatology*, **23**, 545-550.
- [13] Dey, N.C. (2024) Social Inequalities in Beauty and Appearance: An Indepth Analysis. <http://dx.doi.org/10.2139/ssrn.4999242>
- [14] Merino, M., Tornero-Aguilera, J.F., Rubio-Zarapuz, A., Villanueva-Tobaldo, C.V., Martín-Rodríguez, A. and Clemente-Suárez, V.J. (2024) Body Perceptions and Psychological Well-Being: A Review of the Impact of Social Media and Physical Measurements on Self-Esteem and Mental Health with a Focus on Body Image Satisfaction and Its Relationship with Cultural and Gender Factors. *Healthcare (Basel, Switzerland)*, **12**, Article 1396. <https://doi.org/10.3390/healthcare12141396>
- [15] Agrawal, H. and Agrawal, S. (2021) Impact of Social Media and Photo-Editing Practice on Seeking Cosmetic Dermatology Care. *Clinical, Cosmetic and Investigational Dermatology*, **14**, 1377-1385. <https://doi.org/10.2147/CCID.S322859>
- [16] Ahn, C.S., Davis, S.A., Dabade, T.S., Williford, P.M. and Feldman, S.R. (2013) Cosmetic Procedures Performed in the United States: A 16-Year Analysis. *Dermatologic Surgery*, **39**, 1351-1359. <https://doi.org/10.1111/dsu.12267>
- [17] Wimalawansa, S., McKnight, A. and Bullocks, J.M. (2009) Socioeconomic Impact of Ethnic Cosmetic Surgery: Trends and Potential Financial Impact the African American, Asian American, Latin American, and Middle Eastern Communities Have on Cosmetic Surgery. *Seminars in Plastic Surgery*, **23**, 159-162. <https://doi.org/10.1055/s-0029-1224793>
- [18] Quiñonez, R.L., Agbai, O.N., Burgess, C.M. and Taylor, S.C. (2022) An Update on Cosmetic Procedures in People of Color. Part 1: Scientific Background, Assessment, Preprocedure Preparation. *Journal of the American Academy of Dermatology*, **86**, 715-725. <https://doi.org/10.1016/j.jaad.2021.07.081>
- [19] American Society of Plastic Surgeons (2005) Plastic Surgery Statistics Report. <https://www.plasticsurgery.org/documents/news/statistics/2005/cosmetic-procedures-ethnicity-2005.pdf>
- [20] American Society of Plastic Surgeons (2020) Plastic Surgery Statistics Report. <https://www.plasticsurgery.org/documents/news/statistics/2020/cosmetic-procedures-ethnicity-2020.pdf>
- [21] Juliano, M. F. (2022) Social Media's Influence on Skin Care: Risks and Benefits. *Applied Sciences*, **12**, Article 3177. <https://doi.org/10.3390/app12063177>
- [22] Vedamurthy, M. and Chelikani, V. (2021) Skin-Lightening Practices in India. *Cosmoderma*, **1**, Article 68. [https://doi.org/10.25259/CSDM\\_67\\_2021](https://doi.org/10.25259/CSDM_67_2021)
- [23] Imadojemu, S. and Fiester, A. (2013) Skin Bleaching as a Dermatologic Intervention: Complicity or Service? *JAMA Dermatology*, **149**, 901-902. <https://doi.org/10.1001/jamadermatol.2013.4995>
- [24] Jagadeesan, S., Kaliyadan, F., Ashique, K.T. and Karunakaran, A. (2020) Bleaching and Skin-lightening Practice among Female Students in South India: A Cross-sectional Survey. *Journal of Cosmetic Dermatology*, **20**, 1176-1181. <https://doi.org/10.1111/jocd.13689>
- [25] Arora, N. and Amin, S. (2024) Analyzing Global Interest in Skin Whitening by Geographic Region. *Baylor University Medical Center Proceedings*, **37**, 505-507. <https://doi.org/10.1080/08998280.2024.2328448>

- [26] Saade, D., Maymone, M., Garza, H., Secemsky, E., Kennedy, K. and Vashi, N. (2021) Trends in Use of Prescription Skin Lightening Creams. *International Journal of Environmental Research and Public Health*, **18**, Article 5650. <https://doi.org/10.3390/ijerph18115650>
- [27] Masub, N. and Khachemoune, A. (2022) Cosmetic Skin Lightening Use and Side Effects. *The Journal of Dermatological Treatment*, **33**, 1287-1292. <https://doi.org/10.1080/09546634.2020.1845597>
- [28] Cheng, A.D., de la Garza, H., Maymone, M.B.C., Johansen, V.M. and Vashi, N.A. (2021) Skin-Lightening Products: Consumer Preferences and Costs. *Cureus*, **13**, e17245. <https://doi.org/10.7759/cureus.17245>
- [29] Benson, A.O. and Onunu, A.N. (2021) A Community Survey on the Prevalence, Determinants and Socioeconomic Factors Associated with Skin Lightening Practices in Benin City, South-South, Nigeria. *West African Journal of Medicine*, **38**, 800-806.
- [30] Callender, V.D. (2004) Acne in Ethnic Skin: Special Considerations for Therapy. *Dermatologic Therapy*, **17**, 184-195. <https://doi.org/10.1111/j.1396-0296.2004.04019.x>
- [31] Yin, N. and McMichael, A. (2014) Acne in Patients with Skin of Color: Practical Management. *American Journal of Clinical Dermatology*, **15**, 7-16. <https://doi.org/10.1007/s40257-013-0049-1>
- [32] Yousaf, A., Hagen, R., Delaney, E., Davis, S. and Zinn, Z. (2020) The Influence of Social Media on Acne Treatment: A Cross-Sectional Survey. *Pediatric Dermatology*, **37**, 301-304. <https://doi.org/10.1111/pde.14091>
- [33] Rieder, E., Andriessen, A., Cutler, V., Gonzalez, M., Greenberg, J., Lio, P., Love, E., Park, J., Andriessen, H. and Phillips, K. (2023) Dermatology in Contemporary Times: Building Awareness of Social Media's Association with Adolescent Skin Disease and Mental Health. *Journal of Drugs in Dermatology: JDD*, **22**, 817-825. <https://doi.org/10.36849/jdd.7596>
- [34] Joshi, M., Korrapati, N., Reji, F., Hasan, A. and Kurudamannil, R. (2022) The Impact of Social Media on Skin Care: A Narrative Review. *Lviv Clinical Bulletin*, **1-2**, 85-96.
- [35] Henry, M. and Sadick, N. (2018) Aesthetic Considerations in Female Skin of Color: What You Need to Know. *Seminars in Cutaneous Medicine and Surgery*, **37**, 210-216. <https://doi.org/10.12788/j.sder.2018.053>
- [36] Meier, E.P. and Gray, J. (2014) Facebook Photo Activity Associated with Body Image Disturbance in Adolescent Girls. *Cyberpsychology, Behavior and Social Networking*, **17**, 199-206. <https://doi.org/10.1089/cyber.2013.0305>
- [37] McLean, S.A., Paxton, S.J., Wertheim, E.H. and Masters, J. (2015) Photoshopping the Selfie: Self Photo Editing and Photo Investment Are Associated with Body Dissatisfaction in Adolescent Girls. *The International Journal of Eating Disorders*, **48**, 1132-1140. <https://doi.org/10.1002/eat.22449>
- [38] Veldhuis, J., Alleva, J.M., de Vaate, A.J.D.B., Keijer, M. and Konijn, E.A. (2020) Me, My Selfie, and I: The Relations between Selfie Behaviors, Body Image, Self-Objectification, and Self-Esteem in Young Women. *Psychology of Popular Media*, **9**, 3-13. <https://doi.org/10.1037/ppm0000206>
- [39] MacCallum, F. and Widdows, H. (2018) Altered Images: Understanding the Influence of Unrealistic Images and Beauty Aspirations. *Health Care Analysis*, **26**, 235-245. <https://doi.org/10.1007/s10728-016-0327-1>
- [40] Young, T.K. and Oza, V.S. (2020) Digital Skin: The Impact of Modern-Day Photograph Filtering Applications on Children with Skin Diseases. *Pediatric Dermatology*, **37**, 993-995. <https://doi.org/10.1111/pde.14275>

- [41] Ozimek, P., Lainas, S., Bierhoff, H.W. and Rohmann, E. (2023) How Photo Editing in Social Media Shapes Self-Perceived Attractiveness and Self-Esteem via Self-Objectification and Physical Appearance Comparisons. *BMC Psychology*, **11**, Article No. 99. <https://doi.org/10.1186/s40359-023-01143-0>
- [42] Fardouly, J. and Vartanian, L.R. (2016) Social Media and Body Image Concerns: Current Research and Future Directions. *Current Opinion in Psychology*, **9**, 1-5. <https://doi.org/10.1016/j.copsyc.2015.09.005>
- [43] Yang, C.C. and Brown, B.B. (2016) Online Self-Presentation on Facebook and Self-Development during the College Transition. *Journal of Youth and Adolescence*, **45**, 402-416. <https://doi.org/10.1007/s10964-015-0385-y>
- [44] Vashi, N.A. (2016) Obsession with Perfection: Body Dysmorphia. *Clinics in Dermatology*, **34**, 788-791. <https://doi.org/10.1016/j.clindermatol.2016.04.006>
- [45] Lamp, S.J., Cugle, A., Silverman, A.L., Thomas, M.T., Liss, M. and Erchull, M.J. (2019) Picture Perfect: The Relationship between Selfie Behaviors, Self-Objectification, and Depressive Symptoms. *Sex Roles: A Journal of Research*, **81**, 704-712. <https://doi.org/10.1007/s11199-019-01025-z>
- [46] Ozimek, P. and Bierhoff, H.W. (2019) All My Online-Friends Are Better Than Me—Three Studies about Ability-Based Comparative Social Media Use, Self-Esteem, and Depressive Tendencies. *Behaviour & Information Technology*, **39**, 1110-1123. <https://doi.org/10.1080/0144929X.2019.1642385>
- [47] Haykal, D., Cartier, H. and Kroumpouzou, G. (2024) Educational Strategies to Combat Harmful Cosmetic Dermatology Trends in Generations Alpha and Z. *Clinics in Dermatology*, **42**, 415-419. <https://doi.org/10.1016/j.clindermatol.2024.05.004>
- [48] Elsaie, M.L. (2010) Psychological Approach in Cosmetic Dermatology for Optimum patient Satisfaction. *Indian Journal of Dermatology*, **55**, 127-129. <https://doi.org/10.4103/0019-5154.62733>
- [49] Werschler, W.P., Calkin, J.M., Laub, D.A., Mauricio, T., Narurkar, V.A. and Rich, P. (2015) Aesthetic Dermatologic Treatments: Consensus from the Experts. *The Journal of Clinical and Aesthetic Dermatology*, **8**, S2-S7.
- [50] Harnchoowong, S., Vachiramon, V. and Jurairattanaporn, N. (2024) Cosmetic Considerations in Dark-Skinned Patients. *Clinical, Cosmetic and Investigational Dermatology*, **17**, 259-277. <https://doi.org/10.2147/CCID.S450081>
- [51] Elder, A., Cappelli, M.O., Ring, C. and Saedi, N. (2024). Artificial Intelligence in Cosmetic Dermatology: An Update on Current Trends. *Clinics in Dermatology*, **42**, 216-220. <https://doi.org/10.1016/j.clindermatol.2023.12.015>
- [52] Fritsche, M., King, T. and Hollins, L. (2022) Skin of Color in Dermatology: Analysis of Content and Engagement on TikTok. *Journal of Drugs in Dermatology*, **21**, 718-722.
- [53] Parente, J.B.M., Silva, G.S., Gotschall, J.W., Ferreira, A.L. and Grant-Kels, J.M. (2024) Cosmetic Skin Lightening: Contextualizing Biomedical and Ethical Issues. *Clinics in Dermatology*, **42**, 513-514. <https://doi.org/10.1016/j.clindermatol.2024.04.001>
- [54] Wang, J.V., Rieder, E.A., Schoenberg, E., Zachary, C.B. and Saedi, N. (2020) Patient Perception of Beauty on Social Media: Professional and Bioethical Obligations in Esthetics. *Journal of Cosmetic Dermatology*, **19**, 1129-1130. <https://doi.org/10.1111/jocd.13118>
- [55] Lester, J.C., Taylor, S.C. and Chren, M.M. (2019) Under-Representation of Skin of Colour in Dermatology Images: Not Just an Educational Issue. *The British Journal of Dermatology*, **180**, 1521-1522. <https://doi.org/10.1111/bjd.17608>

- [56] Moolla, S. and Miller-Monthrope, Y. (2022) Dermatology: How to Manage Facial Hyperpigmentation in Skin of Colour. *Drugs in Context*, **11**, 2021-11-2.  
<https://doi.org/10.7573/dic.2021-11-2>
- [57] Berthé, A. (2024) Understanding the Motivations behind Deliberate Lightening of Skin among Burkinabe Women through a Socio-Anthropological Analysis. *Social Science & Medicine*, **360**, Article 117334.  
<https://doi.org/10.1016/j.socscimed.2024.117334>