Resources for skin of color images



To the Editor: We commend Adelekun et al¹ for emphasizing a deficiency of skin of color (SOC) images in textbooks. Only 1 of 6 textbooks had a greater than 1% increase in representation of phototypes V/VI from 2006 to 2020, and half of textbooks excluded images of dark-skinned patients with very common dermatologic conditions (ie, acne, psoriasis). SOC images depicting dermatologic conditions, such as erythema dyschromicum perstans, commonly seen in darker skin types, were often excluded. The authors recommended referencing textbooks focusing on patients of color, like Taylor and Kelly's Dermatology for Skin of Color and Asian Skin: A Reference Color Atlas of Dermatology and Venereology. We concur with Adelekun et al¹ that there is an urgent need to include dermatologic images of darker complexions in textbooks; however, publishing timelines are typically much longer for textbooks compared with journals and online resources. In this letter,

we suggest additional resources for SOC images (Table I).

Many dermatology journals have placed increased emphasis on curating SOC images, with online links to find these materials easily. For example, *JAAD Case Reports* homepage includes a SOC link redirecting to relevant articles with images. On the *JDD* homepage, a SOC link features the journal's latest SOC articles and images. *MDedge Dermatology's* Diversity in Medicine section redirects to SOC articles/images from *Cutis* and *Dermatology News*.

Many dermatologic organizations provide useful SOC images on their websites. We previously analyzed images on the American Academy of Dermatology Public Education website to identify for SOC inclusion/exclusion (June 30-July 2, 2020).² Although there was a need for more SOC images depicting certain diseases and conditions, the keloid and vitiligo sections had large proportions of SOC images, with skin types V/VI accounting for 63% and 75% of images, respectively. Additionally, the

Table I. Resources for skin of color images

Name	Website	Cost	Features/advantages	Search settings/limitations
Journals				
JAAD Case Reports	Jaad case reports .org	Open Access	Collections section with SOC link, 74 SOC articles (date of search: 12/10/20)	Cannot sort or filter by condition Can search within collection
			Optional monthly e-mail alerts for new SOC content	SOC link found at the bottom of the page
Journal of Drugs in Dermatology	Jddonline.com	Subscription required for full JDD online access, also accessible through many institutions	Dermatologic Topics SOC link, featuring latest SOC news,	Cannot filter or sort by SOC topic Only shows latest
			research, images SOC link easy to find on	articles, not all
		Free for US Dermatology health care workers	right side of page	
		Free—Case reports, current and archived issues of eJDD		
Cutis	MDedge.com/ dermatology	Unlimited access with free Medscape Network Account	MDedge Dermatology homepage with Diversity in Medicine section, with SOC articles/images from Cutis and Dermatology News	Cannot sort or search within this section
			Diversity in Medicine link bolded and easy to find	

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J AM ACAD DERMATOL JUNE 2021 e275

Table I. Cont'd

Website	Cost	Features/advantages	Search settings/limitations
Aad.org/public	Free	Public Education website has information and images on various dermatologic diseases and conditions Keloid, vitiligo, sarcoidosis, and scar pages have high proportion of SOC images Diseases and Conditions found easily at the top of the page	Birthmark, rosacea, ringworm, blistering disorders, and skin cancer sections have few SOC images
		Easy to navigate between various conditions	
Skinofcolorsociety.org	Free	Promotes awareness within the special interest of SOC	Each topic contains a maximum of one image
		on skin diseases that affect SOC patients Dermatology Education found easily at the	Easy to navigate between various conditions
Visualdx.com	Subscription, also accessible through many institutions	Contains 40,378 clinical images, with 53.9% (21,744) skin types I-II, 19.1% (7722) III-IV, 21.2% (8,555) V-VI and 5.8% (2327) indeterminate (no skin type assigned, corneal and mucosal images) (Heidi Halton—Image Collection Manager, personal communication, December 9, 2020) Dermatology Skin of Color easily found on front page	Can search by diagnosis or by physical exam findings
	Aad.org/public Skinofcolorsociety.org	Aad.org/public Free Skinofcolorsociety.org Free Visualdx.com Subscription, also accessible through	Aad.org/public Free Public Education website has information and images on various dermatologic diseases and conditions Keloid, vitiligo, sarcoidosis, and scar pages have high proportion of SOC images Diseases and Conditions found easily at the top of the page Easy to navigate between various conditions Skinofcolorsociety.org Free Promotes awareness within the special interest of SOC Contains topics/images on skin diseases that affect SOC patients Dermatology Education found easily at the top of the page Visualdx.com Subscription, also accessible through many institutions Contains 40,378 clinical images, with 53.9% (21,744) skin types I-II, 19,1% (7722) III-IV, 21.2% (8,555) V-VI and 5.8% (2327) indeterminate (no skin type assigned, corneal and mucosal images) (Heidi Halton—Image Collection Manager, personal communication, December 9, 2020) Dermatology Skin of Color easily found on

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Name	Website	Cost	Features/advantages	Search settings/limitations
Skin Deep	Dftbskindeep.com	Free	Currently 500 images (adding about 20 images/week), around 95% are of SOC (Tessa Davis— Don't Forget The Bubbles, personal communication, December 11, 2020) Easy to navigate between various conditions	No option to filter for SOC images only Lists all diagnoses A-Z Can search by description, diagnoses, and body part

sarcoidosis and scar pages had roughly equal representations of all skin types.² The SOC Society's website has a Dermatology Education section with articles on skin diseases that impact SOC patients. Of the 22 topics, 16 (72.7%) include a SOC image.

Other online resources are also available. VisualDx is a subscription-based service with photographs and educational materials on various conditions. In October 2020, the website added a new feature, such that morphologies, differential diagnoses, and specific disease entities can be searched easily by skin color. DFTB-Skin Deep is a free database with images of medical conditions portraying a diverse array of skin tones. Searches can be sorted by description, diagnoses, or body area.

These resources were selected based on accessibility, number, and proportion of SOC images within the section (50% or more), covering a broad spectrum of conditions. Suggested resources emphasize SOC education and/or have dedicated SOC sections.

We agree that there is a need for increased efforts to include diverse dermatologic images in textbooks. In the interim, dermatology journals, dermatologic organization websites, and online databases can help meet the need for SOC images for teaching purposes. We hope that our suggestions of additional resources for SOC images will be helpful for medical student, resident, and attending education and in caring for and educating patients.

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Funding sources: None.

IRB approval status: Not applicable.

Reprints not available from the author(s).

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Conflicts of interest

None disclosed.

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https://doi.org/10.1016/j.jaad.2021.01.040