Writing | Symposium 2022

By Mina Phipps

Dark Skin Representation in Medical Diagrams and Health Disparities in People of Color



Nearly half of dermatologists report they have insufficient training and exposure to patients with dark skin. Some studies report that as low as 4% of the images in dermatology textbooks have dark skin. Overall, there is a severe lack of diagrams with dark skin across all medical fields. This lack of representation of dark skin in medical education resources is just another reason that Black people and other people of color receive worse medical treatment and can remain undiagnosed or be misdiagnosed by doctors.

The lack of representation is in part due to colorism, the idea that dark skin is not as appealing as light skin. Historically, people of color have been mistreated by the medical community, especially those with darker skin. Colorism is common in countries across the world even in places where there are people of color because of the "American beauty standard" of being light skinned.

The drawings I have created shed some light on the fact that it's not hard to make diagrams with dark skin. These diagrams are such an easy way to provide representation and better care for people of color. With each diagram, I have explained how the diagram relates to a health disparity and its connection with the social determinants of health and being a person of color.

### **Fetus in Utero**

The disproportionately high rate of Black maternal mortality is a pressing issue. Black women are nearly 1.5 times more likely to enter pregnancy with chronic hypertension compared to White women, making them more susceptible to eclampsia: a known cause of maternal mortality. Multiple studies have linked hypertension to stress. Black women are more likely to experience high stressor life events, such as job loss and insecure housing. One would not think that eclampsia could be traced back to social issues, but it can — and so can the majority of complications related to maternal mortality.

## **Diagram References:**

Feuts: Stanford Children's Health

https://www.stanfordchildrens.org/en/topic/default?id=anatomy-fetus-in-utero-85-P01189

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Although darker skinned people have a lower risk of melanoma than White people, Black people and Hispanic people are usually diagnosed at a later stage and have a higher mortality rate than White people. 90% of melanomas in White people are on



sun-exposed skin while 75% of melanomas on people of color are on skin that is *not* typically exposed to the sun, such as the genitals, soles of the feet, and under the nails. Doctors sometimes assume that since a patient has darker skin, they are less likely to have a melanoma and do not do a full-body skin cancer exam which is essential for finding these "hidden" melanomas. Additionally, nearly half of dermatologists report they have insufficient training and exposure to patients with dark skin, so they also may not be able to recognize what skin cancer looks like on the genitals, nails, and other less common areas that have melanomas. Representation in diagrams and medical rotations that focus on underserved communities of color would be a great way to train dermatologists on how to recognize and treat conditions on darker skin and provide better health outcomes for people of color.

## **Diagram References:**

Penis: Asklepios Medical Atlas

https://www.sciencephoto.com/media/671130/view/male-genital-system-illustration

Melanoma: Europe PMC

https://europepmc.org/article/pmc/pmc5406220

### **Breast Anatomy**

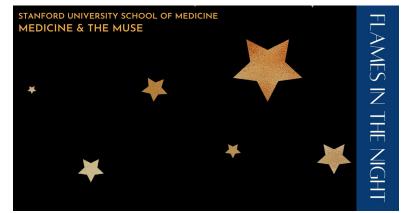
Black women have the highest breast cancer mortality rate: 31%. Some studies have proposed this may be due to Black women having higher exposure rates to various carcinogens. One study looked at Black women who used hair relaxers and found that those who used relaxers with lye had a 30% increased risk of estrogen-receptor-positive breast cancer. Black women who use permanent hair dyes have 45% increased risk of breast cancer while White women only have a 7% increased risk of breast cancer. This disparity may be due to the fact that hair products marketed towards Black women have different (and more harmful) chemicals than the products marketed towards White women.

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Breast Anatomy: Platinum Women's Health

https://www.platinumwomenshealth.com/contents/breast-anatomy

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#### Eczema:

A recent study by UPenn Medicine found that even though Black children tend to be more severely affected by eczema, they are 30% less likely to see a doctor for their eczema compared to White children. Eczema is an extremely manageable

disease with proper treatment. However, Black people are more likely to face barriers to health care, such as being low income and not having insurance, so they can not afford to see a doctor. However, the study also found that there were disparities present even when controlling for income and other demographic factors, so these unknown factors need to be further explored.

Black ambassadors for the National Eczema Association have shared their experiences on being Black with eczema and solutions for better treating the disease on dark skin. One is to discuss differences rather than assuming everyone is the same. Food is an important part of Black culture and diet can be a key component of health. Dermatologists should be open to discussing food and cultural differences in order to best treat eczema and other skin conditions in Black patients.

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"African American Women and Breast Cancer." Breast Cancer Prevention Partners (BCPP), 22 July 2021, <a href="https://www.bcpp.org/resource/african-american-women-and-breast-cancer/#:~:text=In%20the%20US%3A&text=African%20American%20women%20have%20a,American%20women%20than%20White%20women.">https://www.bcpp.org/resource/african-american-women-and-breast-cancer/#:~:text=In%20the%20US%3A&text=African%20American%20women%20have%20a,American%20women%20than%20White%20women.</a>

"Black Children Less Likely to See Doctor for Eczema Despite Being More Severely Affected."

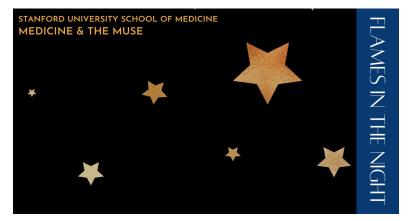
\*\*Pennmedicine.org\*, <a href="https://www.pennmedicine.org/news/news-releases/2017/september/black-children-less-likely-to-see-doctor-for-eczema-despite-being-more-severely-">https://www.pennmedicine.org/news/news-releases/2017/september/black-children-less-likely-to-see-doctor-for-eczema-despite-being-more-severely-</a>

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